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UNIVERSITI TEKNOLOGI PETRONAS

FOSTERING KNOWLEDGE SHARING AMONG SOFTWARE ENGINEERS – CASE OF MALAYSIAN SMALL AND MEDIUM ENTERPRISES

by

MOBASHAR REHMAN

The undersigned certify that they have read, and recommend to the Postgraduate Studies Programme for acceptance this thesis for the fullfilment of the requirements for the degree stated.

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FOSTERING KNOWLEDGE SHARING AMONG SOFTWARE ENGINEERS – CASE OF MALAYSIAN SMALL AND MEDIUM ENTERPRISES

by

MOBASHAR REHMAN

A Thesis

Submitted to the Postgraduate Studies Programme

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MAY 2014

DECLARATION OF THESIS

| Title of thesis | FOSTERING KNOWLEDGE SHARING AMONG SOFTWARE ENGINEERS – CASE OF MALAYSIAN SMALL AND MEDIUM ENTERPRISES |
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I, MOBASHAR REHMAN

hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UTP or other institutions.

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DEDICATION

I dedicate this research work to Holy Prophet PBUH; my grandparents (Haji Muhammad Suleman and Hajra Bibi); parents (Muhammad Nazir Malik and Noor Begum); beloved wife (Hajra Malik); brother (Hafiz Muddassir Rehman) and sisters (Naheed Kauser and Fozia Nazir). Besides, I would also like to dedicate this thesis to my father-in-law (Mazhar Malik) and mother-in-law (Shamim Akhtar).

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ABSTRACT

Software Engineering is a booming industry and has huge impact on world economy. This profession is highly knowledge intensive for which knowledge sharing is critical. Importance of knowledge sharing can be imagined from the findings that apart from small, medium and large enterprises, only Fortune 500 companies lose US $31.5 billion annually because of failure to share knowledge. Due to the importance of knowledge sharing for overall industries and especially for Software Engineering, there is a need to look more rigorously into this aspect. Software Engineering itself is not a mature field yet and most of the studies done so far in this field have focused on the technical aspects. However, to encourage knowledge sharing, non-technical aspects (e.g. organizational, work environment, personality) are very crucial as well. Therefore, this study focused on work design characteristics, personality traits and their relationship with knowledge sharing behavior for Software Engineers. In addition, perception (perceived ease of use and perceived usefulness) towards knowledge sharing technology was also used to see how it affects knowledge sharing behavior of Software Engineers. Justification for focusing on these factors is that knowledge sharing is a behavior or behavioral outcome and working environment, personality traits and perception, influences behavior. Work design characteristics, which were focused in this study includes motivational (task and knowledge characteristics); social and contextual characteristics. Personality traits of Software Engineers were measured through Big Five Personality traits, which are so far considered to be the most comprehensive set of traits to assess the personality. Both online and offline questionnaire methods were used to collect the feedback from Software Engineers. In total, 384 responses were used for analysis. Research was conducted in a non-experiment way in order to collect the actual feedback from respondents. Hierarchical multiple regression method was used to see the impact of each variable on knowledge sharing behavior. Results indicated that work design characteristics (motivational; social and contextual) do affect knowledge sharing behavior of Software Engineers. Similarly, personality traits of Software Engineers

also have an impact on knowledge sharing behavior. Results also revealed that perceived ease of use and perceived usefulness has a significant moderating role.

This research contributed to the body of knowledge for Malaysian software industry in a way that personality traits of Software Engineers were identified. Besides, work design characteristics were also identified. By knowing the personality traits and providing proper working environment, managers in Malaysian software industry can hire individuals with right personality traits which will help them to foster knowledge sharing behavior. At the same time, providing a good working environment also helps to increase knowledge sharing behavior. In addition, moderating role of perceived ease of use and perceived usefulness for knowledge sharing technology will also help managers to provide such technologies to the software developers which will help them to complete their job efficiently and effectively. This ultimately results in higher knowledge sharing behavior.

# ABSTRAK

Bidang kejuruteraan perisian semakin berkembang pesat dalam industri dan mempunyai impak yang besar kepada ekonomi dunia. Profesion ini memerlukan kepada pengetahuan yang sangat tinggi di mana perkongsian maklumat adalah sangat penting. Kepentingan perkongsian maklumat dapat dilihat daripada hasil dapatan kajian yang mana, selain daripada organisasi kecil, sederhana dan besar, hanya Syarikat Fortune 500 sahaja yang mengalami kerugian sebanyak US $31.5 Bilion setiap tahun disebabkan kegagalan untuk berkongsi maklumat. Disebabkan pentingnya perkongsian maklumat kepada semua industri dan terutamanya dalam bidang kujuruteraan, maka adalah perlu untuk melihat aspek ini secara lebih teliti. Bidang kejuruteraan perisian itu sendiri bukanlah satu bidang yang benar-benar utuh dan kebanyakkan kajian yang telah dilakukan dalam bidang ini masih tertumpu kepada aspek-aspek teknikal sahaja. Walaubagaimanapun, bagi menggalakkan perkongsian maklumat, aspek bukan teknikal seperti personaliti, organisasi dan persekitaran tempat kerja juga sangat penting. Justeru, kajian ini berfokuskan kepada kerja membentuk karakter, sifat-sifat peribadi dan hubungan mereka dengan tabiat perkongsian maklumat dalam kalangan Jurutera Perisian. Tambahan pula, persepsi iaitu mudah digunakan dan memberi manfaat terhadap teknologi perkongsian maklumat dan juga digunakan untuk melihat sejauh mana ia memberi kesan kepada tabiat perkongsian maklumat dalam kalangan jurutera perisian. Kewajaran daripada penumpuan terhadap faktor-faktor ini ialah perkongsian maklumat merupakan satu sikap atau hasil sikap dan persekitaran tempat kerja, persepsi dan ciri peribadi mempengaruhi tabiat seseorang. Kerja membentuk karakter yang mana tertumpu dalam kajian ini termasuklah motivasi gerak kerja dan ciri pengetahuan; sosial dan kontekstual. Ciri peribadi jurutera perisian telah diukur melalui kaedah 5 ciri utama peribadi 'Big Five Personality traits', yang mana dikatakan satu kaedah yang paling komprehensif bagi menilai peribadi. Kaedah soal selidik secara atas talian dan luar talian telah digunakan bagi mengumpul data daripada jurutera-jurutera perisian.

Sebanyak 384 borang soal selidik telah digunakan untuk dianalisis. Kajian ini telah dijalankan menggunakan kaedah bukan eksperimen bagi mendapat maklum balas daripada seluruh responden. Kaedah Hirarki Regresi Berganda telah digunakan bagi melihat kesan setiap pembolehubah ke atas tabiat perkongsian maklumat. Hasil kajian mendapati kerja membentuk karakter (motivasi, sosial dan kontekstual) memberi kesan ke atas tabiat perkongsian maklumat dalam kalangan jurutera-jurutera perisian. Ciri peribadi jurutera-jurutera perisian juga mempunyai kesan ke atas tabiat perkongsian maklumat. Hasil kajian juga menunjukkan moderator mudah digunakan dan bermanfaat mempunyai peranan signifikasi yang sederhana. Kajian ini menyumbang kepada ilmu pengetahuan kepada industri perisian di Malaysia di mana ciri peribadi jurutera-jurutera perisian telah dikenal pasti. Selain itu, kerja membentuk karakter juga telah dikenalpasti. Dengan mengetahui ciri-ciri peribadi dan menyalurkan persekitaran tempat kerja yang teratur, pengurus-pengurus industri perisian di Malaysia boleh mengupah individu-individu yang mempunyai ciri-ciri peribadi yang mana akan membantu mereka memupuk tabiat berkongsi maklumat. Dalam masa yang sama, menyalurkan suasana kerja yang baik juga membantu meningkatkan tabiat perkongsian maklumat. Tambahan pula, peranan moderator mudah digunakan dan bermanfaat kepada teknologi perkongsian maklumat juga akan membantu pengurus-pengurus menyalurkan teknologi-teknologi ini kepada pemaju-pemaju perisian yang mana akan membantu mereka menyiapkan kerja secara efisyen dan berkesan. Ini akan membawa hasil yang tinggi kepada tabiat perkongsian maklumat.

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| | |
|---|---|
| KSB | Knowledge Sharing Behavior |
| EKDB | Explicit Knowledge Donation Behavior |
| EKCB | Explicit Knowledge Collection Behavior |
| IKDB | Implicit Knowledge Donation Behavior |
| IKCB | Implicit Knowledge Collection Behavior |
| SD | Software Developer |
| SEs | Software Engineers |
| KST | Knowledge Sharing Technology |
| BFPTs | Big Five Personality Traits |
| SD | Standard Deviation |
| KM | Knowledge Management |
| ICT | Information and Communication Technology |

CHAPTER 1

INTRODUCTION

## 1.0 Introduction

Organizations have realized that one of their key assets is knowledge, which their employees possess (Mccall, Arnold and Sutton, 2008). This realization is mainly because of the shift from industrialization to knowledge based economy. Knowledge has emerged as the key component for success and if managed properly, it can be leveraged to gain competitive advantage (MDC, 2005). The importance of knowledge is evident in the following statement:

*"In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge."* (Nonaka, 1998, p.21)

Due to the importance of knowledge, it is vital to manage it, which is known as Knowledge Management (KM). Management of knowledge is vital because "*Knowledge is power, but without the adequate management of that knowledge, the consequences for [organizations] could be devastating*" (Cameron, 2000, p.3). Although KM is now almost two decades old as it emerged in early 1990s (Drucker, 1993; Metaxiotis, Ergazakis and Pasarras, 2005, p. 7; Prusak, 2001, p.1003), however there is still no agreement on the definition of KM and different definitions were presented by various studies (Kakabadse, Kakabadse and Kouzmin, 2003). However, one of the widely accepted views about KM is that it is a process through which organizations acquire, organize and share their knowledge (Alavi and Leidner, 2001).

Software Engineers (SEs) have used KM in a way that they were learning, capturing and reusing knowledge but did not used the term KM (Rus and Lindvall, 2002). Software development is a knowledge intensive profession (Bjornson and Dingsøyr, 2008; Rus and Lindvall, 2002) because a software is based on the information (Teubner and Nietsch, 2000) or knowledge the customer, software development team has. Similarly, Hoch, Roeding, Purkert and Linder (1999, p.7) mentioned that "*Software is nothing but pure knowledge in codified form*". Therefore, there is no doubt that KM is important for SEs as KM's prospect in software industry is high (Teubner and Nietsch, 2000).

One of the main objectives of KM is the smooth flow of knowledge among organizational members, which is possible through knowledge sharing. In our case, the main objective of KM is to share knowledge among software developers (hereafter referred as SEs). Knowledge sharing is the most widely research topic in KM (Ford, 2001; Gupta, 2001). Knowledge sharing is defined as the behavior through which one individual share his/her knowledge and experience with other members of the organization (Cyr and Choo, 2010). Knowledge sharing helps an organization in many ways. For example, performance of an organization can be improved through knowledge sharing (Liebowitz, 2001; Liao, Chang, Cheng and Kuo, 2004), it helps to improve decision making (Harlow, 2008), in a way that with more knowledge available, decisions can be taken timely, quickly and accurately. Another main advantage of knowledge sharing to organizations is innovation (Lin, 2007a). In Software Engineering, knowledge gained from previous projects can be applied to new projects (Kumar, Paul and Tadisina, 2005) in order to minimize errors which will reduce cost and improve decision making. When people share their knowledge, collective knowledge is created, resulting in new ways to improve processes, products and software.

Although Knowledge Sharing Behavior (KSB) plays a vital role for the successful implementation of KM (Shin, 2004; King, Marks and McCoy, 2002; Hendriks, 1999), it is not an easy task (Scholl, Konig, Meyer and Heisiq, 2004; Davenport and Prusak, 1998) because KSB is not a natural process and organizations have to pursue some kind of strategies to encourage their people to share knowledge. Shull et al., (2004) also highlighted that sharing of knowledge between organizational members in experimental Software Engineering is difficult because individuals do not want to give away their knowledge (Rus and Lindvall, 2002). Due to this, current research work focused on KSB of SEs.

### 1.1 Background/Importance of Knowledge Sharing for Software Engineering

Knowledge which software development team possess is of great value because "*it allows to reconstruct at a later time why ideas were discarded, why incompatibilities existed, and how a problem was finally solved*" (Lohmann and Niesenhaus, 2008, p. 39). Since software development is team based activity, knowledge possessed by every individual is crucial to be shared for better performance of the overall team. However, if SEs do not share knowledge, the overall performance of the team and ultimately the organization's performance will suffer because knowledge sharing is a synergic act (Sowe, Ghosh and Soete, 2009). If a SE shares his/her knowledge with another SE, in return that SE may also share his/her knowledge. In this way knowledge of both SEs will increase resulting in the improvement of the overall knowledge of team members. Similarly, since knowledge sharing is a synergetic activity, when one team will share their knowledge or experience with other teams(s), they will also gain in return. Thus it will have a positive impact on the organization as well. This whole situation shows that individuals are the core or base for knowledge sharing because if they hold their knowledge then the performance of the team(s) and organization will suffer.

Changes in software development field such as offshore development, introduction of agile practices like "*release and iteration planning, pair programming and pair rotation*" encourage knowledge sharing (Chau and Maurer, 2004, p. 175). In addition, software development is a collaborative process (Chau and Maurer, 2004). This shows that activities and processes related to software development or in Software Engineering field are positively affected if knowledge is shared and negatively affected if knowledge is not shared. Due to this, to support software development, knowledge sharing has become an important research topic (Nakakoji, Yamamoto and Ye, 2006).

Irrespective of the importance of sharing knowledge and knowing that it is a difficult task (Balaji, 2011) because people do not share their knowledge (Lin and Huang, 2010) due to many reasons/barriers (Riege, 2005) still enough studies have not been conducted on this issue in the context of Software Engineering. Areas in which studies mainly focused in Software Engineering, includes technical and quantitative aspects (John, Maurer and Tessem, 2005). However, research on non-technical aspects (individual/organizational/work etc.) of Software Engineering is limited. Nambisan and Wilemon (2000) reported the same thing that there are very few studies, which have focused on the human (individual) and organizational factors in the context of Software Engineering. Pirzadeh (2010) also conducted another research work on non-technical aspects of Software Engineering and mentioned that although this factor (human which is a non-technical aspect) has importance with regard to software development process but it has been ignored by researchers over the years.

## 1.2 Importance of Software Engineering Industry for Malaysia

Software development is growing globally and same is the case with Malaysian Software Engineering industry, evident from the statistics given below. Manpower demand for Malaysian Information and Communication Technology (ICT) industry in 2012 was 293,703 (MSC Malaysia, 2009a). From this, majority of the demand was related to software development (115,210) (MSC Malaysia, 2009a) which is 39% of the total demand. The growth in demand for software development skill is continuously increasing from the last many years (MSC Malaysia, 2009a). In 2008 (88,799); 2009 (91,410); 2010 (98,740) and 2011 (106,658) (MSC Malaysia, 2009a). Not only demand for software developers increased and is increasing, on the other hand supply also increased. This was reported by MSC Malaysia, (2009) in which they mentioned that software development graduates in 2008 were 7,182; in 2009, 7,553 and in 2012 total number of expected graduates were 12,203. Software development is the largest skill area (26%) for overall graduating students (MSC Malaysia, 2009a) only from public universities. This increase in demand and supply of manpower for software development shows the importance of conducting more research in this field.

## 1.3 Problem Area/Motivation

Organizations are now differentiated from each other based on the collective knowledge their employees possess (Aurum, Daneshgar and Ward, 2007). It is because of the fact that organizations view knowledge as a key component for competitive advantage (Cabrera, Collins and Salgado, 2006). Since Software Engineering is knowledge intensive profession (Aurum, Jeffery, Wohlin and Handzic, 2003a; Dingsoyr, Djarraya and Royrvik, 2005; Robillard, 1999) therefore knowledge is very important for software development. The knowledge which is not in use is less valuable (Sveiby, 2001) thus knowledge has to be shared among SEs in order to succeed. However, research has shown that individuals are not willing to share their knowledge (Liang, Liu and Wu, 2008) due to many reasons (e.g., organizational factors, stress and personal gains (Rehman, Mahmood, Salleh and Amin, (2010))). The fact that only Fortune 500 companies loses at least 31.5 billion USD per year due to failure of knowledge sharing (Babcock, 2004) shows the amount of impact knowledge sharing can have on organizations. This again emphasizes the importance to do more research on this aspect.

Since KM is a multi-disciplinary field which includes economics, informatics, psychology and technology (Basri and O'Connor, 2010), many factors from various fields can affect its implementation. As knowledge sharing is one of the important part of KM (Bock and Kim, 2001), and a critical component for successful implementation of KM which makes it base of KM (Ahmad, Sharom and Abdullah, 2006). Therefore it can be concluded that variety of factors from various fields can also affect KSB. Research so far done in software development have heavily focused on aspects which are more technical in nature like "*development methodologies and techniques, software project management, productivity, development process maturity, risk management, software reuse and customer/user involvement"* (Nambisan and Wilemon, 2000). Similarly, John et al., (2005) also mentioned that previously more research was carried out on technical aspects of Software Engineering rather than on knowledge sharing concerns which received not as much of attention (Turner and Makhija, 2006). This was also highlighted by Nambisan and Wilemon, (2000) that research in software development field has focused on "*development methodologies, techniques, and use of technology for supporting developing process*".

Studies on knowledge sharing influencing factors related to individual (personality) and organization are lacking (Carter and Scarbrough, 2001; Voelpel, Eckhoff and Forster, 2005). Wang and Noe, (2010) also highlighted in their knowledge sharing framework that personality and organizational factors need future research with regard to knowledge sharing.

Software Engineering has become a very broad field (Capretz and Ahmed, 2010) which means that now different factors from various fields can affect software development. One of such factors is personality because software is the result of human activities (Capretz and Ahmed, 2010) which makes individuals as the core component for software development. This shows that people are crucial for software development because "*software is developed for people and by people*" (John, Maurer and Tessem, 2005, p.1). Since people are crucial for software development, these people need to collaborate with each other due to collaborative nature of software development activity. Thus personality of SEs becomes more important when it comes to collaboration because people with different personality traits may find it difficult to collaborate effectively with each other. However, research which is related to personality in Software Engineering is "*scattered*" and "*difficult to interpret uniformly*" (Capretz and Ahmed, 2010, p.6). Since studies on personality in Software Engineering field are difficult to interpret uniformly, there is need to conduct a comprehensive research work on Malaysian SEs since other studies which have been done in different countries cannot be applied to Malaysia. This is due to the "*idea that the people of each nation have a distinctive, enduring pattern of behavior and/or personality characteristics*" (Clark, 1990, p.66). As, SEs have distinct personality profile (Capretz, 2003) and enough studies are not done on the role of personality in SEs (Rehman, Mahmood, Salleh and Amin, 2012), thus a research work specific to Malaysian SE's personality should be conducted.

Another important aspect which needs to be considered for software development is work environment/design characteristics. Work environment is crucial to be studied for any profession because work plays a vital role almost in everybody's life (Bokti and Talib, 2009). This aspect (work design characteristics) is also important from the point of view that the way work is designed will affect different outcomes at individual, group and organizational level (Morgeson and Campion, 2003). Importance of designing work is evident from the fact that thousands of studies have been conducted on this issue (Morgeson and Humphrey, 2006). So far, in the field of Software Engineering, Job Characteristics Theory (JCT) (explained in Chapter 2: Section: 2.9) has been most widely used (Hall, Baddoo, Beecham, Robinson and Sharp, 2009) which shows the importance of job characteristics in software development field. However, this theory does not cover many work characteristics. Therefore, there is a need to focus on wider work design characteristics.

Technology is also an enabler for KSB (Davenport, 1997) as it helps to convert information to knowledge (Chen, Chen and Kinshuk, 2009) and provides tools to share that knowledge. However, the role technology plays for successful implementation of KM and knowledge sharing depends on the perception towards acceptance of Knowledge Sharing Technology (KST) by individuals working in the organization. This perception of employees depends on two aspects. If they perceive that the technology in the organization for knowledge sharing is easy to use (*Perceived Ease of Use*) and will benefit them (*Perceived Usefulness*) then there are higher chances that employees will use that technology. *Perceived Ease of Use* (PEOU) and *Perceived Usefulness* (PU) are the two factors for measuring perception of technology acceptance or use (Yuen and Ma, 2004). Otherwise, if they perceive that the technology is not useful for them and it is difficult to use then this will de-motivate them and they will not use technology to share their knowledge, which will result in less KSB among SEs. In addition, PEOU and PU are very important when it comes to explaining the use of any system (in this case, KST) (Lengris et al., 2003).

## 1.4 Problem Statement

Knowledge sharing is a social phenomenon (Brown and Duguid, 2002). This means that to encourage KSB among SEs, non-technical aspects (organizational, social, cultural, individual, work environment etc.) should be taken into consideration. Unfortunately, to date, research in software development field has focused more on technical aspects (John et al., 2005). Bjornson and Dingsøyr, (2008) also highlighted that in Software Engineering, technology testing aspect has so far been heavily focused. Based on this it can be concluded that Software Engineering is not mature field (Ward and Aurum, 2004) because there are still many areas where research is required. To fill the gap, based on the importance of KSB for software development among SEs, this research work focuses on analyzing the impact of personality, work characteristics and perception towards technology acceptance on KSB among SEs.

### 1.5 Research Questions

| |
|---|
| RQ1. How personality and Knowledge Sharing Behavior among Malaysian Software Engineerss are related? |

RQ1a. What are the personality traits of Malaysian Software Engineers?

RQ1b. How personality traits effect KSB of Malaysian Software Engineers?

| |
|---|
| RQ2. How work environment and Knowledge Sharing Behavior among Malaysian Software Engineers are related? |

RQ2a. What are the work design characteristics of Malaysian Software Engineers?

RQ2b. How work design characteristics impact KSB among Malaysian Software Engineers?

| |
|---|
| RQ3. How technology acceptance perception is related with personality, work environment and Knowledge Sharing Behavior of Malaysian Software Engineers? |

RQ3a. How technology acceptance perception (Perceived Ease of Use and Perceived Usefulness) moderates the relationship between personality traits and Knowledge Sharing Behavior?

RQ3b. How technology acceptance perception (Perceived Ease of Use and Perceived Usefulness) moderates the relationship between work design characteristics and Knowledge Sharing Behavior?

| |
|---|
| RQ4. What framework will be suitable for increasing Knowledge Sharing Behavior among Malaysian Software Engineers? |

## 1.6 Research Objectives

1. To identify the personality traits of Malaysian Software Engineers.
2. To evaluate the effect of personality traits on Knowledge Sharing Behavior of Malaysian Software Engineers.
3. To identify the work design characteristics of Malaysian Software Engineers.
4. To analyze the impact of work design characteristics on Knowledge Sharing Behavior of Malaysian Software Engineers.
5. To examine the role of technology acceptance perception (Perceived Ease of Use and Perceived Usefulness) between personality traits, work design characteristics and Knowledge Sharing Behavior among Malaysian Software Engineers.
6. To propose and validate a framework for increasing Knowledge Sharing Behavior among Malaysian Software Engineers through personality, work design characteristics and technology acceptance perception.

## 1.7 Summary of Research Methodology

This research work focuses on the KSB of SEs. Positivist approach with deductive logic was used. Survey methodology was used to collect data. Data was collected through postal and online questionnaire. All the data was collected only once at one point of a time due to time limitation which makes this research work cross sectional. Questionnaires used in the research work (personality and work design characteristics) were well validated. Cronbach Alpha was used to have a look at the reliability of the data. All the items of the instrument were scaled from 1 – 5. Variance Inflation Factor (VIF) and tolerance methods were used to test for multocillinearity.

This research work is descripto-explanatory in nature as it tries to describe the personality and work design characteristics of Malaysian SEs besides knowing the predictors for KSB. This research is basic in nature meaning that it does not try to solve a particular problem instead focuses on generic problem which is faced by many organizations rather than solving a specific problem for a specific organization.

Pilot study was conducted to increase researcher's confidence on the instrument and to get more reliable data. Changes suggested during pilot study stage were incorporated into the final instrument. Random cluster sampling and simple random sampling methods were used to collect the response from respondents. In total, data from 384 SEs was used for analysis. To test the framework which is proposed in this research work, hypotheses were developed. Hierarchical multiple regression method was used in order to see the effect of each variable.

### 1.8 Contributions of Research Work to Literature and Industry

This research work focused on Malaysian SEs. Main contribution of the work is the framework which is proposed and validated to enhance the KSB among SEs. Additionally, this research also contributed to the body of knowledge through focusing on the work design characteristics and personality traits of Malaysian SEs. Moderating roles of *PEOU* and *PU* were analyzed between work design characteristics and KSB, personality traits and KSB.

This research work focused on KSB particularly related to software development. KSB was categorized into Explicit Knowledge Donation Behavior (EKDB), Explicit Knowledge Collection Behavior (EKCB), Implicit Knowledge Donation Behavior (IKDB) and Implicit Knowledge Collection Behavior (IKCB). Twenty-eight items related to EKDB, EKCB, IKDB and IKCB were developed by the author of this research work with the help of knowledge areas mentioned in SWEBOK, (2004). This categorization of KSB into EKDB, EKCB, IKDB and IKCB gives a complete view about the impact of personality traits and work design characteristics on all types of KSBs.

### 1.9 Scope of Research Work

This research work focused on software development industry of Malaysia. Respondents which were targeted in this research work are Software Engineers (developers). Main focus of the research work was KSB among Malaysian SEs. This research work analyzed the KSB based on the personality traits of Malaysian SEs because every country has population with unique personality types or characteristics. This research work used Big Five Personality Traits (BFPTs) to know about the personality traits of Malaysian SEs and their impact on KSB. Besides, this research work also focused on the work design characteristics of Malaysian SEs. Other studies (e.g., Couger et al., (1990); Couger and Ishikawa, (1995) and Ferratt et al., (2003)) which have been done before in Software Engineering profession have used JCT most of the times but the problem with this theory (JCT) is that it encompasses only five job related factors. Therefore, current research work used work design characteristics by Morgeson and Humphrey, (2006) because they cover far more aspects of work environment (21 in total) than JCT. In addition, since technology is also a key player for KSB therefore moderating role of technology acceptance perception through PEOU and PU was also analyzed in order to see that how perception towards KST plays its role.

### 1.10 Research Phases

This research work was conducted through the phases mentioned in Figure 1-1. Problem was identified through literature review. Based on this problem identification, factors or variables related to the problems were identified and framework was developed through hypotheses formulation. Suitable methodology; sampling and questionnaire development was done with the help of literature review. Once survey questionnaire was developed and tested through pilot study, data was collected through both online and postal methods. After data was collected, this data was tested for reliability and then analysis was conducted. Once data analysis was done and framework was validated with the help of data analysis then the final phase was thesis writing in which results were discussed and concluded.

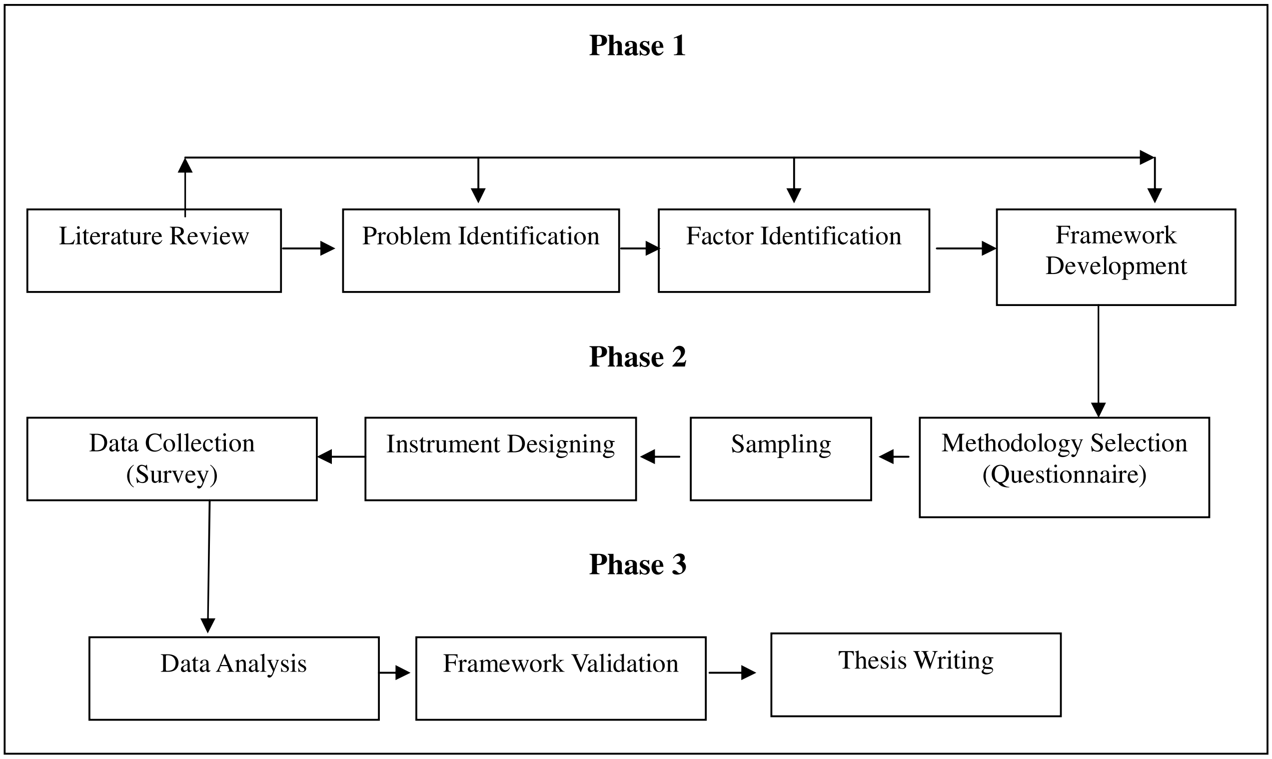


Figure 1-1: Research Design Process

### 1.11 Thesis Formation

**Chapter 1:** This chapter explains about the importance of knowledge sharing among SEs. Problem area or research gap was also discussed besides mentioning the research questions and objectives. Chapter 1 also highlights the brief summary of methodology and contributions of this research work.

**Chapter 2:** Chapter 2 is about previous research work. In this chapter, types of knowledge, KM and knowledge sharing in Software Engineering are discussed. This chapter also reviewed about personality traits; how personality traits and KSB are related among SEs. In addition, this chapter also reviewed work design characteristics; and the relationship between work design characteristics and KSB.

**Chapter 3:** This chapter is regarding methodology. Chapter discusses about research process, purpose of research, framework and developed hypotheses. This chapter also discusses about factors and constructs development. Sampling technique; sample size;

pilot study; results of pilot study; instrument designing; reliability analysis; scaling; hierarchical multiple regression analysis; items for personality traits and work design characteristics are also discussed in this chapter.

**Chapter 4:** Results regarding personality traits of SEs are reported in this chapter. Results obtained through hierarchical multiple regression method between personality traits (independent variable) and KSB (dependent variable) were reported. Besides, moderating effects of PEOU and PU between personality traits and KSB are also reported in this chapter.

**Chapter 5:** Results regarding work design characteristics of Malaysian SEs are mentioned in this chapter. This chapter also explains the results obtained through hierarchical multiple regression between work design characteristics (independent variable), PEOU and PU (moderating variables) and KSB (dependent variable). This chapter is divided into four parts. Part I is about the results between task characteristics, PEOU, PU and KSB. Part II is about the results between knowledge characteristics, PEOU, PU and KSB. Part III is about the results between social characteristics, PEOU, PU and KSB while part IV is about the results between contextual characteristics, PEOU, PU and KSB.

**Chapter 6:** Results mentioned in chapter 4 and 5 are discussed in this chapter. Work design characteristics and personality traits of Malaysian SEs are discussed. Results of hypotheses between task; knowledge; social; contextual characteristics and KSB are discussed. Also discussed in this chapter are the results of hypotheses between openness to experience, extraversion, conscientiousness, neuroticism; agreeableness and KSB. Moderating roles of PEOU and PU are also part of discussion in this chapter.

**Chapter 7:** This is the final chapter of the thesis. It presents how objectives were met and explains the contributions of this research work. This chapter also discusses about limitations and future work which may be carried out to validate and further explore this area. Theoretical and practical implications of the research are also part of this chapter.

### 1.12 Summary of Chapter

This chapter discussed about the background and importance of this research. This chapter also highlighted the problem area. Objectives and scope of the research work were also discussed. In addition, research stages, overview of research methodology, contributions and formation of thesis were also part of this chapter.

# CHAPTER 2

# LITERATURE REVIEW

## 2.0 Overview

In this chapter, previous work, relevant to this study is reviewed. Main topics covered includes Knowledge Management (KM) in Software Engineering, knowledge sharing in Software Engineering, personality traits of Software Engineers, establishing relationship between personality traits and Knowledge Sharing Behavior (KSB) among Software Engineers (SEs). Additionally, this chapter also includes literature on work design characteristics and KSB among SEs.

## 2.1 Knowledge Management

Knowledge management has proved its importance and that is why it has been adopted by 80% of the world large organizations (KPMG, 2000). Organizations have realized that knowledge is one of the key assets which they can have and people of that organization are the ones who possess knowledge (Mccall, Arnold and Sutton, 2008). This knowledge, which people possess, one can gain through positive or negative experiences (Sharif, Mohammad, Alias and Shahibudin, 2004). Knowledge not only plays a vital role in an organization but it has a bigger role to play as well due to shift towards knowledge economy. That is why knowledge based economies stress on the creation, use and sharing of knowledge (Forf and Staples, 2006; Lu, Leung and Koch, 2006; Martensson, 2000; Metaxiotis, Ergazakis and Psarras, 2005; Salojarvi, Furu and Sveibv, 2005; Spiegler, 2000). This shift towards knowledge age from information age, has opened new horizons for individuals and organizations and they have started to realize the importance of this asset as "*emerging competitive advantage*" (Syed-Ikhsan and Rowland, 2004).

In order to get benefit from knowledge, it has to be managed (Seechi, 1999a). Bogdanowicz and Bailey, (2002) also highlighted that knowledge is an asset and it should be "*valued, developed and managed*". Although Knowledge Management has been studied through centuries but the term KM was used only in early nineties (Drucker, 1993; Metaxiotis, Ergazakis and Psarras, 2005, p.7; Prusak, 2001, p.1003) or mid nineties (Suhaimee, Abu Bakar and Alias, 2005). There are various definitions which exist in the literature to define KM and this is due to the fact that this field (KM) is relatively new (Gan, Ryan and Gururajan, 2006) in comparison to other fields. However, there are certain aspects on which practitioners and academicians have agreed regarding KM, such as it creates, captures, shares and uses organization-wide knowledge in order to improve the performance of the organization and to gain or even maintain a competitive advantage (Ruggles, 2012; Barquin, 2001; Coulson-Thomas, 1997; Davenport and Prusak, 2000; Ford and Staples, 2006; Fuller, 2002; Metaxiotis, Ergazaki and Psarras, 2005; Storey and Barnett, 2000; Tiwana, 2000; Tsai and Lee, 2006; Turban and Aronson, 2001). In other words, KM is the process through which organizations collect, manage, and share the knowledge which employees have (Bhojaraja, 2005).

## 2.2 Types of Knowledge

Knowledge can be either explicit or tacit. Explicit knowledge is the one, which can be easily codified whereas tacit knowledge is more based on the intuition or can be experiential (Frappaolo, 2008). However there is another form of knowledge which is known as implicit knowledge. This knowledge is believed to be the organization's tacit knowledge but due to various focused efforts, it has been converted to explicit knowledge (Frappaolo, 2008). However, different researchers have used tacit and implicit knowledge to be the same. For example, Rolf, (2004, p.1) says: "*literature about tacit (implicit) knowledge often tries to classify items of knowledge in relation to the capacity of expression*". In this sentence, Rolf, (2004) is using implicit knowledge to be same like tacit knowledge. Teubner and Nietsch, (2000) also explained implicit knowledge and their study says that a knowledge which experts cannot explain is implicit knowledge and they relate tacit knowledge (explained by Polanyi, (1974)) with implicit knowledge. Additionally, Lee (2001) also categorized knowledge into explicit and implicit. Therefore, this research work will also categorize knowledge as explicit and implicit.

### 2.3 Knowledge Sharing

Knowledge sharing is the degree to which one person shares his/her knowledge with other person, group or organization (Liang, Liu and Wu, 2008) or it is the transfer of knowledge from one person or group to another (Abzari, Barzaki and Abbasi, 2011). Thus, it is about disseminating knowledge from one person (sender) to another person (receiver) which means that to share knowledge; sender (the one who possesses knowledge) should share with the person who is seeking that knowledge (receiver). Thus, knowledge sharing happens when one person of an organization shares his or her knowledge with another person of the organization (Ryu, Ho and Han, 2003).

Knowledge sharing is considered as one of the important factors for the development of competitive advantage of an organization (Agrote and Ingram, 2000; Bhagat, Kedia and Harveston, 2002; Tagliaventi, Bertolotti and Macri, 2010; Bruton, Dess and Janney, 2007). Knowledge sharing within an organization is beneficial in various perspectives like increasing mutual understanding between different departments (Cabrera, Collins and Salgado, 2006; Gibbert and Krause, 2002; Liu and Phillips, 2011; Nahapiet and Ghoshal, 1998), improving coordination and efficiency (Liu and Phillips, 2011; Srivastava, Bartol and Locke, 2006) and it is useful for new product development (Tsai and Ghoshal, 1998). Besides, it also boosts an organization's efforts to successfully implement KM because it is considered to be the nucleus of KM (Davenport and Prusak, 1998; Hendriks, 1999).

Knowledge sharing can be categorized into individual knowledge and organizational knowledge (Sliat and Alnsour, 2013). Individual knowledge is the one which resides in the mind of a person and the organizational knowledge resides in the database of organization (Lam, 2000). Knowledge whether individual or organizational, can be classified into "*knowledge donation"* and *"knowledge collection"* (Van Den Hooff and De Ridder, 2004). Knowledge donation is described as the "*communication based upon an individual's own wish to transfer intellectual capital*" whereas knowledge collection is "*attempting to persuade others to share what they know*" (Van Den Hooff and De Ridder, 2004). This concept of dividing knowledge sharing into knowledge donation and collection was also reported by Husseini and Elbeltagi, (2014). Thus when individuals are giving their knowledge to others, it will be referred as knowledge donation and when they are asking others to share their knowledge, it will be knowledge collection (Wahlroos, 2011).

Studies related to knowledge sharing can be done at individual, group and organizational level (Jackson, Chuang, Harden and Jiang, 2006). However, the focus of this study will be on individual level knowledge sharing behavior (for Software Engineers) as individuals are the ones which form groups and participate in organization level knowledge sharing. Thus individuals are the building blocks for group and organization level knowledge sharing as reported by Foss and Minbaeva, (2009) that group and organizational level knowledge sharing depends on the individual's behavior towards knowledge sharing.

### 2.4 Knowledge Management in Software Engineering

"*Software is nothing but pure knowledge in codified form*" (Hoch, Roeding, Purkert and Linder, 1999, p.7)

Managing knowledge is very important for software development organizations because they can use the knowledge learned previously from various projects and then apply to future projects (Kumar, Paul and Tadisina, 2005). In other words, lessons learned from previous projects (either successful or unsuccessful) can help software developers in future in a way that if the project was successful they can use the best practices learned and if the project was unsuccessful, software developers in future can avoid from those mistakes.

Software development organizations depend heavily on "*intellectual capital*" (refers to "*the knowledge and knowing capability*" (Nahapiet and Ghoshal, 1998, p.245)) therefore KM is very important for them (Kumar et al., 2005). Bjornson and Dingsøyr, (2008) also mentioned the importance of knowledge for Software Engineers. In their study, they said that Software Engineering is a "*knowledge-intensive activity*". This means that KM is critical for this profession and if knowledge is not being properly managed then organizations may suffer. For example, if the project manager of a software development leaves the job due to any reason and the knowledge which that project manager had at that time was not stored (knowledge storage: one of the steps of KM other than codification, sharing etc.) then organization might have to close that project if the alternate to that project manager is not available.

Dingsoyr, (2002) highlighted that organizations are moving towards KM to improve software development. This might be due to the effect of globalization in software development industry. As more and more software companies are now indulging in doing business globally so their knowledge is distributed at different locations. To manage this knowledge, organizations need to integrate entire knowledge so that they can deliver projects in time and meet the client's requirements (Tiwana, 2003).

Knowledge Management not only helps to store existing knowledge but also helps to create new knowledge (Mehta, 2008) and this is another reasons why software development organizations are moving towards KM. As software development is a continuously developing industry (Rus and Lindvall, 2002), organizations has to keep up with the advancements in technology or practices in order to build or maintain competitive advantage. To cope with this problem, new knowledge has to be adopted (Mathiassen and Pourkomeylian, 2003) or adapted. Better KM can help organizations to fill strategic gaps (Sher and Lee, 2004) by using existing and new knowledge.

Rus and Lindvall, (2002) mentioned that KM can help organizations to decrease time and save cost during software development by taking correct decisions through knowledge sharing and acquiring new knowledge about new technology. In short, KM helps organizations in not only managing old knowledge but also to create new knowledge (Mehta, 2008) thus to implement KM, software companies have invested millions of dollars (Mehta, 2008) which shows the importance of KM for software development industry.

### 2.5 Knowledge Sharing in Software Engineering

*"The knowledge of a software development team in any project is of great value"* (Sowe, Ghosh and Soete, 2009, p.349) because, *"it allows to reconstruct at a later time why ideas were discarded, why incompatibilities existed, and how a problem was finally solved"* (Lohmann and Niesenhaus, 2008, p. 39).

Although Software Engineering is a knowledge intensive profession (Handzic, 2003), little research has been done on KM in the context of Software Engineering (IEEE, 2002; Aurum, Jeffery, Wohlin and Handzic, 2003b). KM involves various processes (knowledge generation, storage etc.) including knowledge sharing (Vesiluoma, 2007) which is a very crucial part of KM. Knowledge sharing occurs when organizational members share their knowledge and experience between them (Lin, 2007b). Knowledge sharing helps software development organization in many ways. For example, if knowledge is shared between team members or organizational employees, there will be no fear of knowledge loss due to employee turnover (Amin, Basri, Hassan, and Rehman, 2011). However, knowledge sharing received little "*systematic"* attention (Turner and Makhija, 2006).

Need for knowledge sharing in software development has increased due to globalization. Software are now developed at various locations (inside or outside the country). Many organizations in these days off-shore their business to avail benefit of lower cost. Thus, the team members, who are developing the software, like team leader and project manager, may not be at one location (Wongthongtham, Chang, Dillon and Sommerville, 2009). Therefore, people from various backgrounds, cultures and experiences will be working together and everyone can contribute to the software body of knowledge based on the experience they have (Upadhyaya and Krishna, 2007). The biggest challenge in developing global software systems is getting effective and efficient work by team members and in case where team members are located in more than one country, sharing of knowledge and expertise is very critical (Balaji, 2011) for the success of project. This is important because knowledge sharing during project completion, between different projects over a period is useful for projects (Balaji, 2011).

Software development for large-scale systems is based on socialization (Nakakoji, Yamamoto and Ye, 2006) meaning that different people will be interacting during that project. Since many software developers will be working on one software, so one developer may not have complete knowledge of the software whereas for software developers it is important to learn about that system (Nakakoji, Yamamoto and Ye, 2006) in order to develop a system where client satisfaction has high priority. Therefore, "*knowledge collaboration"* among software developers "*supports software development"* (Nakakoji, Yamamoto and Yunwen, 2006, p.1).

Software development organizations depend on "*knowledge workers*" (Blackler, 1995) but every knowledge worker will not have complete knowledge for everything and these individuals need to learn and acquire new knowledge from different resources (Walz, Elam and Curtis, 1993).

Studies have defined knowledge sharing to be a team process where team members interact and communicate with each other (Cohen and Bailey, 1997). In case of software development teams, knowledge sharing can occur at two levels. First level of knowledge sharing occurs between projects (knowledge or experience gained from one project is applied to another) and the second level of knowledge sharing occurs during life cycle of the project (Upadhyaya and Krishna, 2007).

Since one of the objectives of this study is to explore the relationship between knowledge sharing behavior and personality of Software Engineers, therefore first knowledge sharing behavior was discussed in sections 2.3 and 2.5. After discussing knowledge sharing in Software Engineering context, focus of next section is on the personality characteristics in general and how they are related to knowledge sharing behavior.

## 2.6 Personality Characteristics

Personality of a person is the blend of diverse characteristics, which differentiate one person from another (Ndalolo, 1990). Personality has an important role to play in the life of an individual as personality influences the behaviors (Dimkpa, 2011). Even the selection of profession, indicates about the personality (Crawford, 2006). Similarly, Dimkpa, (2011) also assumed that personality characteristics show the appropriateness of a person against a particular job. Personality is measured in terms of traits (Robbins, 2006, p.33) and large number of instruments exist to measure these traits (Goldberg, 1971).

Decision makers in an organization get little direction because they face problems due to large number of personality traits available. However, there are two methods, which do not have large number of personality traits but they are still very effective, namely Myers–Briggs Type Indicator (MBTI) (Briggs and Myers, 1976) and the Big Five model (Goldberg, 1981). From the last two decades, these two methods have dominated over other methods to identify the personality traits (Robbins, 2006).

### 2.6.1 Myers-Briggs Type Indicator

MBTI is one of the most widely used personality tests and is based on personality and psychology work by Jung (Petersen, 2006). Every year, millions of copies of this test are used (Pittenger, 1993). This is because of the reason that people think that this test helps them to not only understand their own personality but of others as well (Pittenger, 1993).

Rather than focusing on personality traits, MBTI focuses on personality types (Bayne, 1997, p. 12). MBTI is composed of four dichotomies (Schaubhut, Herk and Thompson, 2009). Personality of a person is identified by selecting one of the preferences from each dichotomy. Based on these preferences and dichotomies, there are 16 possible combinations in which the personality of an individual can fall. Those dichotomies include:

- Extraversion (E) or Introversion (I)
- Sensing (S) or Intuition (I)
- Thinking (T) or Feeling (F)
- Judging (J) or Perceiving (P)

*Extrovert (E) Vs. Introvert (I)* – Extrovert people are outgoing, social and assertive whereas introvert people are quiet and shy.

*Sensing (S) Vs. Intuition (I)* – People with sensing type are practical, they enjoy things in order and focus more on details. Intuitive people like to see the big picture and rely more on gut feeling.

*Thinking (T) Vs. Feeling (F)* – Decisions made by thinkers are based on logic and reasoning whereas individuals with feeling as their personality type use more emotions and personal preferences rather than using logical reasoning.

*Judging (J) Vs. Perceiving (P)* – Individuals who are judgers like to have more control and enjoy things in order. Perceivers are more spontaneous and flexible in nature.

Table 2-1 summarizes different combination of personality types a person may have using MBTI. Main personality types are introversion, extraversion, sensing and intuition. In total there are 16 combinations of personality types which MBTI can explain like ISTJ, ISFJ, INFJ and INTJ.

Table 2-1: MBTI Preferences

| Types | | Sensing (S) | | Intuition (I) | |
|---|---|---|---|---|---|
| | | Thinking (T) | Feeling (F) | Feeling (F) | Thinking (T) |
| Introversion (I) | Judging (J) | ISTJ | ISFJ | INFJ | INTJ |
| | Perceiving (P) | ISTP | ISFP | INFP | INTP |
| Extraversion (E) | Judging (J) | ESTJ | ESFJ | ENFJ | ENTJ |
| | Perceiving (P) | ESTP | ESFP | ENFP | ENTP |

Source: Petersen, (2006)

Besides the wide use of MBTI, there are considerable criticisms. MBTI has not only been criticized for unclear results (Johnsson, 2009) and vague description (Bayne, 1997), its reliability and validity has also been questioned (Johnsson, 2009). Johnsson (2009) highlighted that MBTI is reliable only when its average is 0.80. Similarly, Pittenger, (1993) also mentioned that people, who do this test twice, might not get the same results because of its vague description.

### 2.6.2 Big Five Personality Model

There is another personality test which is known as Big Five or five-factor model. This model comprehensively describes the personality of individuals and its validity has been strongly supported through empirical testing (Digman, 1990; Goldberg, 1993; McCrae and Costa, 1996; O'Connor, 2002). It consists of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness (Digman, 1990).

*Neuroticism* – Neuroticism is related to emotional stability. People with low score in this trait tend to be emotionally stable (Rothmann and Coetzer, 2003) whereas higher score individuals are emotionally less stable. Lower emotional stability or in other words high score in neuroticism leads to less rational decision-making and poor stress management (Rothmann and Coetzer, 2003). People who are opposite to neuroticism are calmer and they handle stressful situations more properly (Hough, Eaton, Dunnette, Kamp and McCloy, 1990). Neuroticism has an impact on job performance as reported by Judge, Higgins, Thoresen and Barrick, (1999) that neuroticism and job performance are inversely proportional to each other. This means that higher neuroticism will lead to less job performance and vice versa. Therefore it can be hypothesized that low neuroticism will lead to higher KSB because knowledge exchange which is a performance related outcome (Rabbiosi, Makela and Rabbiosi, 2009) is also part of knowledge sharing (Foss, Minbaeva, Pedersen and Reinholt, 2009). Thus, when low neuroticism has a positive impact on job performance (and knowledge exchange is a performance related outcome) therefore low neuroticism leads to high knowledge sharing. Figure 2-1 summarizes the above discussion and also helps to formulate the hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.4.2).

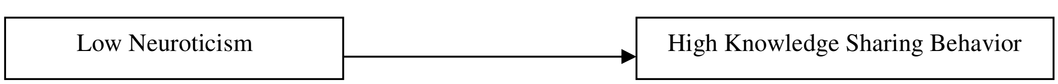


Figure 2-1: Relationship between neuroticism and KSB

*Extraversion* – Extrovert people are more energetic and optimist than introvert. Besides, extrovert people are social, talkative and assertive (Rothmann and Coetzer, 2003). Based on these characteristics, extroversion is considered as a positive affect (Clark and Watson, 1991). There are various studies which has shown positive relationship between extraversion and job performance. One of such studies was by Johnson, (1997). This study was done on police personnel and it concluded that there is positive relationship between job performance and extraversion. As job performance and extraversion are directly proportional to each other, thus extraversion trait positively affects job performance of an individual. This results in the proposition that extraversion will lead to higher knowledge sharing behavior because if extraversion leads to higher job performance and knowledge exchange (often part of knowledge sharing) is a performance related outcome then it can be implied that extraversion will lead to higher knowledge sharing. Summary of this discussion is mentioned in figure 2-2. This figure and discussion also helps to formulate the hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.4.4).

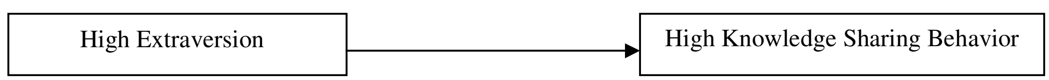


Figure 2-2: Relationship between extraversion and KSB

*Openness to Experience* – Individuals who score less in this trait are more towards following traditional methods and conservative in nature. In contrast to this, people who score high in this trait are unconventional, come up with new ideas, have active imagination and are aesthetic (Rothmann and Coetzer, 2003). They are curious and because of this, they have a life, which is rich with experiences (Rothmann and Coetzer, 2003). This trait also refers to number of interest one person is paying attention to and how profoundly those interest are being pursued (Kumar, Bakhshi and Rani, 2009). People with this trait are more successful on jobs which are highly adaptive (Horton, 1992; Raudsepp, 1990) and as Software Engineering is an adaptive profession due to continuous changes in technology, application, tools etc., therefore SEs who has openness to experience trait will perform better on their jobs meaning that they will have good job performance and higher KSB. Figure 2-3 summarizes the above discussion and helps to formulate the hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.4.1).

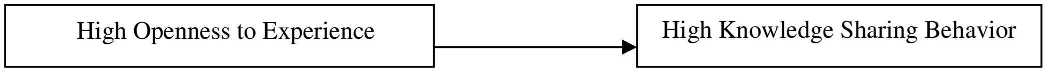


Figure 2-3: Relationship between openness to experience and KSB

*Agreeableness* – People with this trait are sympathetic and helpful to others whereas people who are not agreeable are egoistic and they are not helpful rather they are competitive instead of helping others (Rothmann and Coetzer, 2003). Professions where teamwork is important, agreeable people will be successful (Judge, Higgins, Thoresen and Barrick, 1999) thus showing that this trait is a predictor of job performance (Tett, Jackson and Rothstein, 1991) in team work environment. As software development is a team oriented activity thus SEs who score high in agreeableness perform better on their jobs and KSB than those who score less on this trait.

Figure 2-4 summarizes the above discussion on agreeableness and KSB and helps to formulate the hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.4.5).

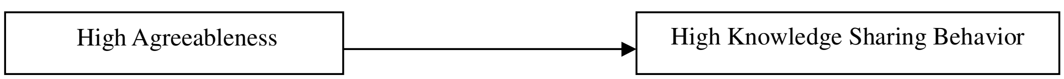


Figure 2-4: Relationship between agreeableness and KSB

*Conscientiousness* – Such people are strong-minded and focused. They are persistent, responsible, planner and well organized (Rothmann and Coetzer, 2003). Many studies have shown positive relationship between conscientiousness and job performance. Some of those studies include Barrick and Mount, (1991); Barrick, Mount, and Strauss, (1993); Frink and Ferris, (1999). Therefore, people with conscientiousness nature perform well on their job and KSB. However, it should be kept in mind that people who are very conscientiousness may become workaholic (Rothmann and Coetzer, 2003).

Figure 2-5 summarizes the above discussion on conscientiousness and KSB and helps to formulate the hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.4.3).

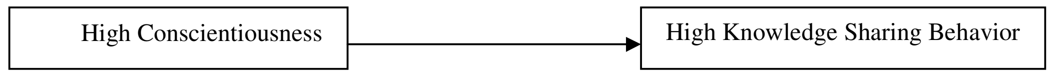


Figure 2-5: Relationship between conscientiousness and KSB

## 2.7 Personality Characteristics of Software Engineers

Behavior of individuals play a key role in the effectiveness of an organization. This behavior is predicted by the personality that individual possess (Abidin and Daud, 2012). Personality consists of trait or multiple traits which make a person to behave in a situation in a certain way (Semij, Boone, van Der Velden and van Witteloostuijn, 2005). Personality traits increase the effectiveness of an organization in a way that they are a significant predictor for the job performance of an individual (Barrick, Stewart and Piotrowski, 2002). This is the reason due to which the effect of personality is being analyzed across various disciplines and few of those areas where personality will have an effect on the performance of an individual are the application areas of Information Systems (IS), Software Engineering (SE) or Computer Science (CS) (Abidin and Daud, 2012).

Ultimately, it comes to the personality traits of an individual (Software Engineer in this case) when solving the issues related to software production (Capretz and Ahmed, 2010). Due to this, different researchers have tried to work on this issue but the effort which has been done so far in this area is spread and one cannot reach to the same conclusion (Capretz and Ahmed, 2010).

Two of the important studies conducted in the field of Software Engineering based on the personality are Sodiya et al., (2007) and Capretz and Ahmed, (2010). Sodiya et al., (2007) analyzed the personality of Software Engineers using Big Five Personality Traits and Capretz and Ahmed, (2010) used MBTI. Results for the both studies are as follows:

Sodiya et al., (2007) concluded that software management engineers, requirement engineers, I/O designer, programmer, tester and evaluator are all low in neuroticism. Requirements engineer and tester have medium level of extraversion whereas software management engineers, I/O designer, programmer and evaluators have low extraversion as their personality trait. Testers are high in openness to experience, software management engineers and evaluators have medium level of openness to experience while requirement engineers, I/O designer and programmers are low in openness to experience. Requirement engineers, I/O designers and evaluators are high in conscientiousness whereas software management engineers, programmers and testers have medium level of conscientiousness. For agreeableness, all the software engineers (software management engineers, requirement engineers, I/O designer, programmer, tester and evaluator) are high in this trait.

The second study which was conducted by Capretz and Ahmed, (2010) used MBTI to assess the personality types of software engineers. This study linked the job requirements of different software engineer's categories to the personality types. For example, this study accomplished that for system analyst, personality types which are required includes extroversion and feeling. Similarly, intuition and thinking is suitable for software designers; introversion, sensing and thinking suits software programmers; sensing and judging for software testers and sensing and perceiving is suitable for maintenance engineers.

Another study which was based on Capretz and Ahmed, (2010) was conducted by Rehman, Mahmood, Salleh and Amin, (2012). This study linked the personality characteristics (through Big Five Personality traits) of software engineers to their job requirements. Findings of this study state that: Openness to experience and agreeableness are suitable for system analyst and system designer; extraversion, openness to experience and agreeableness are linked to system programmer; openness to experience and conscientiousness are linked with software tester and maintenance engineer.

This linking of personality traits and types with job requirements depend on the roles a Software Engineer has to perform on the job. For example, Software analyst's role is to gather client's requirements and convert them into a logical model for the development of software. Getting client's requirement requires frequent communication which demands a person with extraversion personality trait. Software designers needs to have problem solving and innovation skills (Capretz and Ahmed, 2010) which makes agreeableness and openness to experience more suitable personality traits for them (Rehman, Mahmood, Salleh and Amin, (2012)). Software programmers have to pay attention to every possible detail and they have less interaction with those who are outside of their organization thus the personality traits which are more suitable for them are low in extraversion and openness to experience. Similarly, for software testers and maintenance engineers, conscientiousness and openness to experience personality traits are best suited to their job requirements.

## 2.8 Personality Traits and Knowledge Sharing Behavior among SEs

Earning more profit has become very difficult for many organizations due to global competition as more and more organizations are competing in the same market; which makes profit margin to decrease (Aurum, Daneshgar and Ward, 2007). Due to this intense competition, organizations need to differentiate themselves from their competitors and one of such important criterion for differentiation is knowledge possessed by the employees of an organization (Aurum, Daneshgar and Ward, 2007). Knowledge possessed by different employees can be a criteria for differentiation because software development is a knowledge rigorous activity (Handzic, 2003) and more knowledge will lead to higher software quality.

Although; KM has been widely studied in different fields but little research is conducted in the field of Software Engineering (Aurum, Jeffery, Wohlin and Handzic, 2003a). There is a need to understand more about the knowledge sharing in the context of Software Engineering because if employees working in an organization do not share the knowledge they possess, then the overall productivity of the organization will suffer.

As, software development is purely a human activity (software developed for people by people) therefore it is evident that human factor plays a key role in software development (Amin, Basri, Hassan and Rehman, 2011). To share knowledge with each other, people have to communicate (Van Den Hooff and De Ridder, 2004) and various factors can effect this communication among people (Jadin et al., 2012). One of such factors is personality (combination of different personality traits) or personality traits (Matzler, Renzl, Muller, Herting and Mooradian, 2008). As people with two different personality types or personality traits may not properly understand each other. This can lead to lower knowledge sharing among Software Engineers.

Capretz, (2003) conducted a study on Software Engineers using MBTI. This study was conducted on 100 Software Engineers. Results of this study showed that there were individuals with more introversion than extraversion; more sensing than intuitive characteristics; more thinking than feeling and more judging than perceiving. These results show that Software Engineers are high in introvert trait (more introvert than extrovert); openness to experience (more sensing than intuitive); agreeableness (more thinking than feeling) and conscientiousness (more judging than perceiving). Based on these results of Capretz, (2003) (which were based on MBTI) and then their equivalent personality traits (Furnham, 1996) from Big Five, one can conclude that Software Engineers with less extraversion personality trait will share less and those Software Engineers who are high in agreeableness, openness to experience and conscientiousness will share more.

Another study conducted by Rehman, Mahmood, Salleh and Amin, (2012) also highlighted the Big Five Personality Traits for various categories of Software Engineers. For example, this study showed that for system analyst and system designer, openness to experience and agreeableness are important personality traits. Both these personality traits lead to higher knowledge sharing behavior thus system analysts and system designers will share more knowledge. For system programmer, extraversion, openness to experience and agreeableness are important. So system programmers with such kind of personality traits will have higher KSB. Openness to experience and conscientiousness are important for software tester and maintenance engineer, so these traits, if high will result in higher KSB.

Layman, Cornwell and Williams, (2006) did a study in North Carolina State University (NCSU). They showed the following distribution of students based on the personality types. More introverts than extroverts; more intuitive than sensing; more thinking than feeling and more judging than perceiving. They mentioned that this distribution of Software Engineering students is common among engineering students and especially CS students (Capretz, 2003; Godleski, 1984) with the exception of sensing-intuition. In a study by Layman, Cornwell and Williams, (2006), there are more number of students with intuitive personality type than sensing which is not the case with Software Engineers as was mentioned by Capretz, (2003) that there were more Software Engineering students with sensing personality type than intuition type in his study. Based on the study of Layman, Cornwell, and Williams, (2006), it can be deduced that KSB among Software Engineers will be as follows: software engineers with introvert and low openness to experience as their personality traits will have lower KSB whereas those Software Engineers who has agreeableness and conscientiousness as their personality types will have higher KSB.

Martínez, Rodríguez-díaz, Licea and Castro, (2010) conducted a study on Software Engineers. This study analyzed the personality of Software Engineering teams through Big Five personality traits. Results from this study showed that software analysts; architects; developers; documenter; tester and presenter are more conscientiousness and neuroticism oriented people. These kinds of people exhibit higher KSB. This study also found that different categories of Software Engineers scored differently on these Software Engineering categories thus emphasizing that different roles require different personalities. And when it comes to different personalities communicating with each other; people experience certain kinds of problems which can affect KSB because of differences in personality traits.

### 2.9 Work Design Characteristics

Nature and formation of work affects every organization because the working environment in which a person is working will affect the contribution s/he will make for that organization (Torraco, 2005). Therefore designing of work not only impacts the organizational success but also helps the individual (Morgeson and Campion, 2003). Due to the importance of work design, different approaches have emerged from decades. One of the earliest works in this field was from Smith, (1776). He proposed the idea of breaking complex jobs into simpler ones. Later on, Frederick Taylor and Henry Ford came up with their idea. Again, the notion was same that how to make jobs smaller and specialized and due to this we had ‘Scientific Management (1911)’ theory from Taylor and assembly line concept from Ford. However, breaking down of jobs into simpler tasks caused boringness, tiring and dissatisfaction among employees (Fraser, 1947; Walker and Guest, 1952). This resulted in the emergence of job rotation and horizontal job enlargement (Parker, Wall and Cordery, 2001) and later on Two factor Theory (Herzberg, Mausner and Snyderman, 1959). This theory focused on two types of factors namely motivators (intrinsic to job) and hygiene (extrinsic factors to job).

Two factor theory was replaced by Job Characteristic Model (JCM) (Hackman and Oldham, 1976). Till today, JCM has been widely used by organizations and researchers whenever it comes to the measurement of work design and it remains as the most common method of work design (Parker, Wall and Cordery, 2001). JCM covers five aspects of job described by Hackman and Oldham, (1980). These are:

1) Skill Variety: Degree of different skills and activities required in carrying out a work.
2) Task Identity: Degree of doing a job from beginning to end.
3) Task Significance: Degree of impact a job has on the lives of others.
4) Autonomy: Degree of freedom, independence provided by the job in carrying out the work.
5) Feedback: Degree of direct information provided by the work about its effectiveness.

Another important development in work design was the introduction of Sociotechnical Systems (STS). However, the main focus of this theory was group work design rather than individual (Parker, Wall and Cordery, 2001).

As this is an information age or knowledge era, more and more information is available and at the same time due to availability of sophisticated technology, geographic distances are reduced (Schick, Gordon and Haka, 1990). This has led to different work designs or job characteristics in comparison to earlier ones (Barley and Orr, 1997; Luff, Hindmarsh and Heath, 2000; Norman, 1998). One of the latest and more comprehensive study on work design was done by Morgeson and Humphrey, (2006). Morgeson and Humphrey proposed three categories for work design namely; motivational characteristics (further categorized into task and knowledge characteristics); social characteristics and contextual characteristics. This research work also used Morgeson and Humphrey (2006) work design characteristics mainly because of the number of dimensions used in designing work environment.

### *2.9.1 Motivational Characteristics*

These characteristics include task and knowledge characteristics.

#### *2.9.1.1 Task Characteristics*

*(1) Autonomy* - Degree of freedom with which one has to perform job (Hackman and Oldham, 1975). It also includes the freedom to make decisions on job, scheduling work and selection of method to perform job (Breaugh, 1985; Wall, Jackson and Davids, 1992; Wall, Jackson and Mullarkey, 1995). (2) *Task Variety* - Number of tasks required to be performed in order to complete a job (Morgeson and Humphrey, 2006). *(3) Task Significance* - The level of significance job has over others whether inside or outside the organization (Hackman and Oldham, 1975). *(4) Task Identity* - Degree to which job involves whole piece of work (Sims, Szilagyi and Keller, 1976a). *(5) Feedback from Job* - Degree to which a job itself provides information about the effectiveness of task performed (Hackman and Oldham, 1976).

#### *2.9.1.2 Knowledge Characteristics*

Knowledge characteristics include:

*(1) Job Complexity* - Degree to which job is difficult to perform (Morgeson and Humphrey, 2006). *(2) Information Processing* - Amount of information needed to perform job (Morgeson and Humphrey, 2006).

*(3) Problem Solving* - Degree to which a job requires unique ideas or solutions for its completion (Jackson, Wall, Martin and Davids, 1993; Wall, Jackson and Mullarkey, 1995). *(4) Skill Variety* - Degree to which different skills are required to perform a task (Hackman and Oldham, 1980). *(5) Specialization*- Degree to which a job requires specialized knowledge or skills (Morgeson and Humphrey, 2006).

### *2.9.2 Social Characteristics*

Social characteristics include:

*(1) Social Support* - Degree to which a job requires support from others (Morgeson and Humphrey, 2006). *(2) Interdependence* - Degree to which job depends on other tasks and vice versa (Kiggundu, 1981). *(3) Interaction Outside the Organization* - Degree to which job requires the communication of employees with those who are not related to that organization (Morgeson and Humphrey, 2006). *(4) Feedback from Others* - Dgree to which other people working in the organization provides the feedback regarding the performance (Morgeson and Humphrey, 2006).

### 2.9.3 Contextual Characteristics

Contextual characteristics include:

*(1) Ergonomics* - Degree to which a job allows correct position and movement (Morgeson and Humphrey, 2006). *(2) Physical Demands* - Degree to which a job requires physical effort (Morgeson and Humphrey, 2006). *(3) Work Conditions* - Related to the work environment in which job is being performed (Morgeson and Humphrey, 2006). *(4) Equipment Use* - Degree to which a job requires use of complex and different equipment (Morgeson and Humphrey, 2006).

## 2.10 Work Design Characteristics and Knowledge Sharing Behavior

Relationship between work design and KSB is being evaluated in research (Cabrera, Collins and Salgado, 2006; Foss, Minbaeva, Pedersen and MReinholt, 2009; Kaše, Paauwe and Zupan, 2009). However, the work that has been done is not enough (Schmidt, 2012). Most of the work which has been done on the relationship between job or work design characteristics and KSB used JCM. Problem with JCM is that it covers only five aspects of the job. Therefore, current research work will use work design characteristics mentioned by Morgeson and Humphrey, (2006). Reason for the selection is that this study not only covers the job characteristics of JCM but it also includes the other environmental/job related factors which makes it more comprehensive than JCM.

### *2.10.1 Motivational Characteristics and KSB*

Motivational characteristics (task and knowledge) make a job more enriched (Morgeson and Humphrey, 2006) which results in a more interesting job for the employees (Schmidt, 2012). Interesting work is related to organizational commitment which ultimately causes higher KSB (Hall, 2001; Van Den Hoof and Van Weenen, 2004). Thus it can be concluded that motivational characteristics of work design will positively influence KSB.

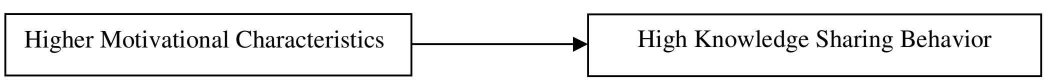


Figure 2-6: Relationship between motivational characteristics and KSB

### *2.10.2 Task Characteristics and KSB*

Task characteristics include autonomy, task identity, task variety, task significance and feedback from job. Higher autonomy on the job means that employees can do planning based on their own schedule which gives them more time to communicate with their colleagues which can result in higher KSB. Cabrera and Cabrera, (2005) also proved in their study that autonomy and KSB are significantly linked to each other. Cabrera and Cabrera, (2005) also showed a positive relationship between task identity and KSB. Those jobs which require more variety are challenging (Daft and Legal, 1986). To overcome these challenges, employees have to communicate more and more with each other and this higher communication increases the possibility of higher KSB (Schmidt, 2012). Those jobs which have high task significance, people feel more meaningfulness in their work (Hackman and Oldham, 1980). To increase this meaningfulness, people might share more (Schmidt, 2012). Feedback from job is related to the evaluation of the job. The more a person knows about a job, his/her knowledge about the results of the job will increase (Hackman and Oldham, 1980). The more a person knows about a job, higher the chances are that s/he will be involved in KSB.

Figure 2-7 summarizes the above discussion on various task characteristics and KSB. This discussion helps to formulate the hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.3.1).

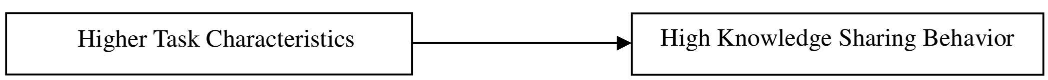


Figure 2-7: Relationship between task characteristics and KSB

### *2.10.3 Knowledge Characteristics and KSB*

Knowledge characteristics include job complexity, information processing, problem solving, skill variety and specialization. Job complexity is about the level of complexity required to fulfill a task. Due to higher complexity, jobs become demanding and challenging (Morgeson and Humphrey, 2006). To complete such kind of job, employees have to consult their colleagues and this increase in communication enhances the possibility of higher KSB (Schmidt, 2012). Information processing refers to the amount of information needed to be processed to complete a job. Such jobs will lead to intensive use of knowledge on work (Kelloway, 2000). This will result in knowledge exchange among colleagues and will increase KSB. Problem solving involves unique ideas or solutions required to complete a task (Jackson, Wall, Martin and Davids, 1993; Wall, Corbett, Clegg, Jackson and Martin, 1990). A job which requires more unique ideas for its completion will result in higher knowledge exchange among employees (Schmidt, 2012). Skill variety is about the skills required to complete a job. Higher the skills required to finish a job, the more enriched that job will be. More enriched jobs increase organizational commitment which leads to higher KSB (Hall, 2001; Van Den Hoof and Van Weenen, 2004). Last knowledge characteristic is specialization. It refers to the extent a job requires specialized knowledge or skill for its completion. According to Schmidt, (2012), the more intensified knowledge characteristics of a job are, there is more knowledge to be shared. Once there is more knowledge to be shared then there is high possibility of increased KSB.

Discussion on knowledge characteristics and KSB is summarized in figure 2-8. This helps in formulation of hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.3.2).

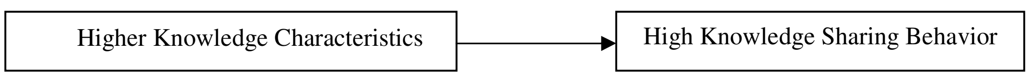


Figure 2-8: Relationship between knowledge characteristics and KSB

### *2.10.4 Social Characteristics and KSB*

Social characteristics include social support, interdependence, interaction outside the organization and feedback from others. Social support is the aspect which covers that how much assistance and support is required from other colleagues (Morgeson and Humphrey, 2006). It is also related to friendship opportunities at work (Sims, Szilagyi and Keller, 1976a). Higher support will lead to higher communication which will result in higher KSB. Similarly, higher friendship opportunities will lead to the development of trust between employees which will cause higher KSB. Interdependence (received or initiated) is related to the level of dependence of jobs on one another (Kiggundu, 1981). Interdependence increases the degree of connectedness (Schmidt, 2012) between different tasks. This connectedness increases the communication between employees which again results in higher KSB. Interaction outside the organization is about the degree to which a job requires employees to communicate with those who are not internal part of that organization (Morgeson and Humphrey, 2006). Again, higher level of external communication increases the communication level between different individuals which can lead to higher KSB. Last social characteristic is feedback from others which is about the degree to which job allow colleagues to provide feedback about the job itself (Morgeson and Humphrey, 2006). Feedback from others allows colleagues to communicate and analyze the effectiveness of tasks which they perform. This communication and analysis increases the degree of communication and during feedback, people share their ideas or experiences about how others can do their jobs more effectively which results in higher KSB.

Figure 2-9 summarizes the discussion about the relationship between social characteristics and KSB. This is also helpful in the formulation of hypothesis (Hypothesis development: Chapter 3, Section: 3.6, Discussion: Chapter 6: Section: 6.3.3).

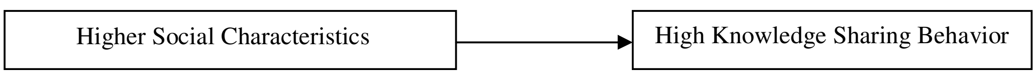


Figure 2-9: Relationship between social characteristics and KSB

### 2.10.5 Contextual Characteristics and KSB

Contextual characteristics include ergonomics, physical demands, work conditions and equipment use. Ergonomics deals with the correct movement of body or body parts on jobs (Morgeson and Humphrey, 2006); physical demand is the physical activity required by the job and work conditions is about work environment (Humphrey, Nahrgang, and Morgeson, 2007). All these dimensions are related to job satisfaction and can increase or decrease it because if job is physically demanding and at the same time ergonomics and work environment is not good, this will make job uncomfortable (Campion, 1988) leading to job dissatisfaction (Humphrey, Nahrgang and Morgeson, 2007) which will results in lower KSB (Rehman, Mahmood, Salleh and Amin, 2010). Another dimension of contextual characteristic is equipment used on the job which is related to the complexity of technology being used as job requirement (Morgeson and Humphrey, 2006). Use of complex equipment or technology on job can lead to dissatisfaction among employee. This dissatisfaction will lead to lower KSB as satisfaction is related to higher KSB (Rehman, Mahmood, Salleh and Amin, 2010).

Figure 2-10 summarizes the discussion on contextual characteristics and KSB. Based on this discussion, hypotheses are developed in Chapter 3, Section: 3.6 and discussed in Chapter 6: Section: 6.3.4.

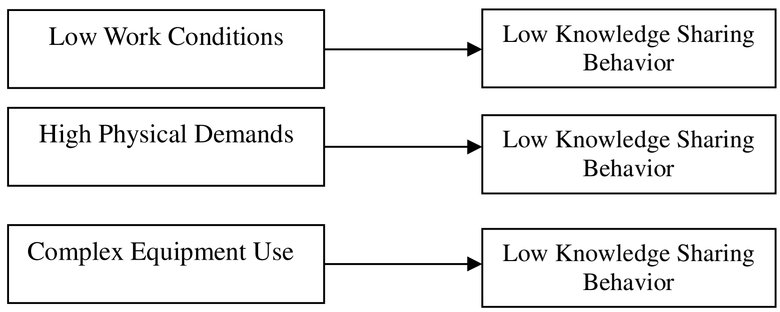


Figure 2-10: Relationship between contextual characteristics and KSB

## 2.11 Role of Technology for Knowledge Sharing Behavior

Knowledge sharing plays a very vital role for the success of KM (Shin, 2004b; King, Marks and McCoy, 2002). To make KM successful, an organization must encourage its employees to share their knowledge (Hansen and Avital, 2005) but sharing knowledge is not an easy task (Scholl, Konig, Meyer and Heisiq, 2004; Davenport and Prusak, 1998) because many employees are reluctant to share their knowledge (Chow, Deng and Ho, 2000). There are various factors which can be enablers for knowledge sharing. Different studies have proposed different factors which can play their role in fostering or hindering KSB like motivation of an individual to share knowledge (and motivation again depends on many other factors), culture of the organization in which a person is working and the relationship between colleagues (Davenport and Prusak, 1998; Szulanski, 1996; Wasko and Faraj, 2005). Another important factor, which plays its role for knowledge sharing, is ICT (Ruggles, 1998). Earlier it was believed that technology is the only factor, which can guarantee the success of KM implementation, but later studies proved that it is not the only factor; instead, it is one of the most important factors. Lin, (2007b) also concluded that KSB does not only involve ICT use, instead it involves social and human interaction. ICT affects KSB directly or indirectly (Hendriks, 1999; Lee and Suliman, 2002) in terms of increasing the speed of sharing and this will also decrease the cost because of quick and timely delivery of knowledge to the recipient irrespective of the distance between the people involved in knowledge sharing (Albino, Garavelli and Gorgoglione, 2004). Technology also helps in codification, combination and spreading of knowledge (Song, 2002). In short, those factors which can impact KSB can be categorized into three areas: technological; organizational or environmental and individual (Ardichvili, Maurer, Li, Wentling and Stuedemann, 2006; Cabrera, Collins, and Salgado 2006; Barson et al., 2000; McDermott and O'Dell, 2001; Riege, 2007).

Technology helps individuals to share their knowledge in many ways. For example; it provides them ease of access and at the same time it helps those who do not like or want face-to-face interaction (Connelly and Kelloway, 2003) due to any reason. They can still share the knowledge they possess by using the technology. As pointed out by Hendriks, (1999) and Lee and Suliman, (2002) that technology can play a direct and indirect role in KSB. Liang, Liu and Wu, (2008), obtained similar kind of results in their study. Their study proved that Information Technology (IT) context (related to ICT) has a moderating role between KSB and trust, organizational commitment and social interaction.

Different other studies also found that ICT has an impact on KSB (Syed-Ikhsan and Rowland, 2004; Bolisani and Scarso, 1999). Similarly, Al-alawi, Al-marzooqi and Mohammed, (2007) recommended that organizations should provide different information systems to employees so that they can share their knowledge. Bock and Kim, (2002) conducted another important study in which they tested the level of "*IT usage*" as a moderating variable between knowledge sharing intention and KSB. They proposed this because IT is considered as very important enabler for KSB in most of the available literature (Davenport, 1997). In addition, they also assumed that those individuals who have intention to share their knowledge and are frequent users of IT will share more knowledge. The results of their study showed that IT usage does not have a significant moderating role to play. However, they suggested that construct for "*IT usage*" needs to be measured with more Information Systems (IS) for KSB. Besides, Fishbein and Ajzen, (1980) also mentioned that when an individual has an intention to perform a particular behavior, there are many factors, which can effect this intention-to-behavior relationship. Since, ICT can have an indirect effect (Hendriks, 1999; Lee and Suliman, 2002) on KSB and as was mentioned by Lin, (2007c) that KSB does not only involve ICT, therefore this research work proposes that ICT will play a moderating role between work design characteristics, personality traits and KSB. Chennamaneni, (2006) hypothesized that different people use information systems to share knowledge based on the belief they have about that system through its availability and ease of use. Beliefs about a particular system can be positive or negative based on the perception towards usefulness (Perceived Usefulness) and ease of use (Perceived Ease of Use) of that system. Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) are part of Technology Acceptance Model (TAM) proposed by Davis et al., (1989) which shows that to adopt any system or technology (Knowledge Sharing Technology in this case), PEOU and PU has a role to play. Perceived Ease of Use (PEOU) refers to "*the degree to which a person believes that using a particular system would be free of effort*" (Davis, 1989), meaning that how easy it is to use the system. Perceived Usefulness (PU) refers to "*the degree to which a person believes that using a particular system would enhance his or her job performance*" (Davis, 1989), implying that whether job performance will increase by using that particular technology or not. People will use the technology for which they have higher PEOU and PU. Thus chances to use Knowledge Sharing Technology available in the organization will increase when PEOU and PU regarding that technology is high. Once people use Knowledge Sharing Technology, probability for higher knowledge sharing behavior will also be greater.

Figure 2-11 summarizes the role of technology between personality traits, work design characteristics and KSB. This also helps to formulate the hypotheses (Chapter 3, Section: 3.6 and discussed in Chapter 6: Section: 6.5).

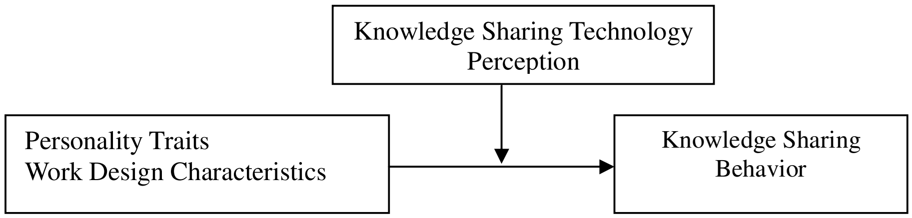


Figure 2-11: Role of Knowledge Sharing Technology Perception

## 2.12 Summary of Chapter

This chapter reviewed about KM, types of knowledge, knowledge sharing behavior and types of knowledge sharing behavior. Besides, this chapter also reviewed about the KM and knowledge sharing behavior among Software Engineers. Chapter also reviewed the literature about relationship between personality traits and knowledge sharing behavior among Software Engineers. In addition, reviewed in this chapter were the relationships between work design characteristics and knowledge sharing behavior among Software Engineers and moderating role of technology.

CHAPTER 3

# RESEARCH METHODOLOGY

## 3.0 Overview

Chapter explains about how this research was conducted. This chapter highlights the research process followed, research time horizon, purpose of research and type of research. Besides, this chapter also mentions about framework. Research questions and their relevant hypotheses are also part of this chapter. Other topics which are covered includes factor development, instrument development, sampling, pilot study, survey instrument, respondents, instrument validity and scaling.

## 3.1 Research Process

Author followed the research onion by Saunders, Lewis and Thornhill, (2007) to conduct the research. Figure 3-1 shows the selection of various methods during research and their explanation is followed subsequently.

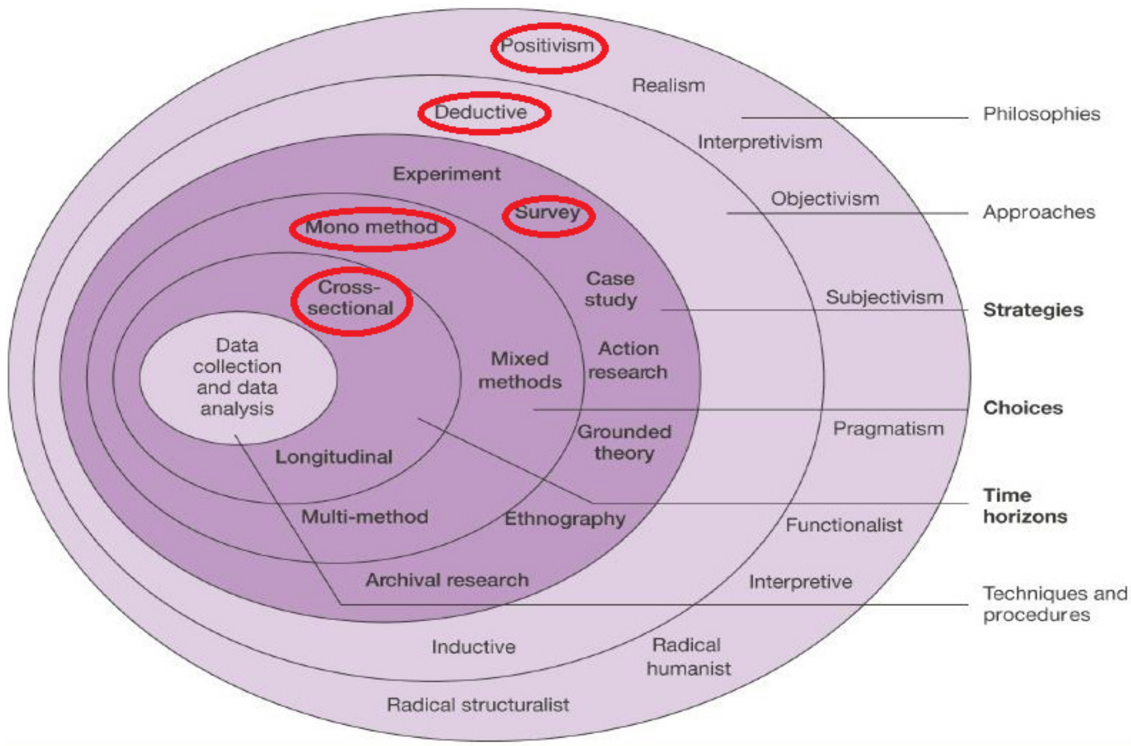


Figure 3-1: The Research Onion, Source: Saunders, Lewis and Thornhill, (2007)

### 3.1.1 Research Philosophy

As this research is focused towards enhancing the behavior (knowledge sharing) of Software Engineers through observing certain variables and since researcher can make use of scientific perspective when observing social behavior (Travers, 2001), therefore, this research follows positivism philosophy. And as positivism is usually associated with deduction approach (Saunders et al., 2007) thus this research used deductive approach. This will result in the formation of probabilistic causal laws that will be used to predict patterns of human activities (behavior) (Neuman, 2003). Positivist researchers hold the view that behavior of an individual (software developer in this case) can be "*patterned and regular*" and can be explained in cause and effect way (Tuli, 2010). Besides, framework approaches have discussed very little about research philosophies but most of them are based on positivism (Carlsson, 2006). This research meets another criterion for being a positivist research which says that researcher is not considered part of study (Tuli, 2010).

### 3.1.2 Research Approach

Research approach can either be deductive or inductive. Deductive approach is the one in which theory or conceptual framework is developed initially and then tested or validated through data collected in later stages. Whereas, in inductive approach data is collected initially and then depending on that data, theories or frameworks are developed (Sauders, Lewis and Thornhill, 2009, p. 61). Based on this definition, this research is deductive research as a conceptual framework was developed first based on the literature and then data was collected from Software Engineers to test that framework.

### 3.1.3 Research Strategy

Research strategy followed by this study was survey as it is normally associated with deductive approach (Sauders, Lewis and Thornhill, 2009, p. 144). Surveys help researcher to collect data from a good size population in a very cost effective way. The method used in surveying is normally self-administered questionnaire (completed by respondents (Sauders, Lewis and Thornhill, 2009, p. 362)) as it helps to collect data in a structured form (Sauders, Lewis and Thornhill, 2009, p. 144). Survey strategy is considered to be "*authoritative*" by people as it is "*easy to explain and to understand*" (Sauders, Lewis and Thornhill, 2009, p. 144). Another reason that why survey method was used in this study is that survey strategy helps to understand the reason(s) for relationships between certain variables (which in this case, researcher is trying to find out the relationship between independent and dependent variables) and then coming up with a model based on these variables and their relationships (Sauders, Lewis and Thornhill, 2009, p. 144). Figure 3-2 explains how questionnaire was distributed.

In short, research grounded on positivist philosophy is based on deductive approach where theory is first developed for testing and then empirically verified (Babbie, 2005).

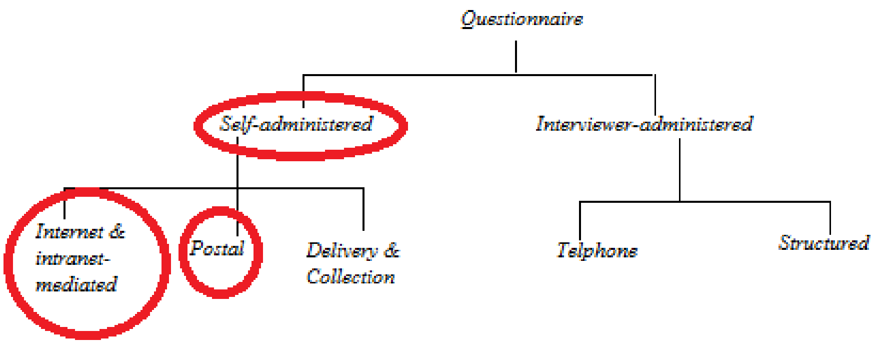


Figure 3-2: Method for Questionnaire Distribution, Source: Sauders, Lewis and Thornhill, (2009, p. 363)

### 3.1.4 Research Choice

Research choice used in this research is mono-method (quantitative: questionnaire). Mono-method is a research choice in which researcher collects data through only one data collection technique and then analyzes that data (Sauders, Lewis and Thornhill, 2009, p. 151). Figure 3-3 explains various research choices and the one used in this research.

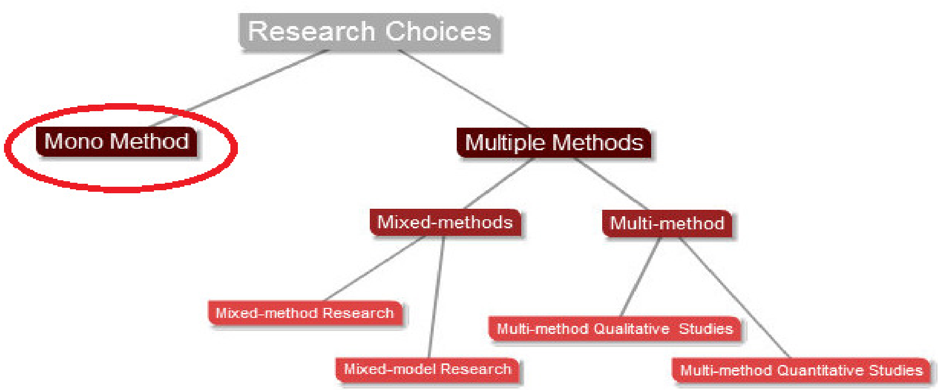


Figure 3-3: Research Choices, Source: Sauders, Lewis and Thornhill, (2009, p. 152)

A mono-method study uses either quantitative or qualitative methods to conduct research (Cameron and Molina-Azorin, 2010). In contrast we have another way of doing research known as mixed-method approach which is becoming popular in these days (Cameron and Molina-Azorin, 2010). Despite its importance, this method is seldom used by researchers in the field of business and research (Cameron and Molina-Azorin, 2010). Reason being that there is still a debate going about the "*incommensurability*" and "*incompatibility*" of the methods used in mix-method research. Based on this argument, qualitative and quantitative methods (as mixed-method study) "*could/should*" not be used in one study (Cameron and Molina-Azorin, 2010). Therefore, it can be concluded, that to mix methods (qualitative and quantitative) in one study is not appropriate (Cameron and Molina-Azorin, 2010).

Besides, "*mixed methods research is not intrinsically superior to research that relies on a single method*" (Cameron and Molina-Azorin, 2010, p.97). Even those who have accepted mix-methods have some reservations. Like, Morse (2005), said that mixing qualitative and quantitative methods within a single set has brought forward some unanswered questions. In addition, there are many other criticisms on mix methods. For example, Sale et al., (2002), argued that how the results of two paradigms can be same if they are looking at different phenomena. They believe that achieving similar results are only because of perception. In short, argument that mixed-method brings "*best of both worlds*" (Giddings, 2006) is not strongly supported. Based on these arguments, mono-method study was used for this research. Besides, mono-method (quantitative) is the most appropriate method to answer the research questions posed in this research and it also helps to generalize the results to the overall population as well.

### 3.1.5 Research Time Horizon or Temporal Classification

Surveys can be classified based on the time period and number of times they are collected. Based on these classifications, surveys can be either cross-sectional or longitudinal (Zikmund, 2003, p. 186). Cross-sectional studies can be referred as "*snapshot*" whereas longitudinal studies can be referred as "*diary*" perspective (Sauders, Lewis and Thornhill, 2009, p. 155). Cross-sectional studies are referred as "*snapshot*" because they provide perspective about an attitude or behavior at a single point of time while longitudinal studies give "*diary*" like effect as they present data over a longer period of time and collected more than once.

*Cross-sectional Data Collection/Survey/Study:* Data which is collected in one go and at a single time is called cross-sectional (Zikmund, 2003, p.187). This method is most commonly used in social science research to measure the determinants of behavior. Another reason for most of the researchers using cross-sectional approach is that academic research is normally time bound (Sauders, Lewis and Thornhill, 2009, p. 155). The main advantage of cross-sectional data is that it can easily be organized and pay-off is immediate. Besides, cross-sectional studies are time saving and cost effective (Sekaran, 2003, p. 136). Due to these reasons, cross-sectional data collection method is very popular among practitioners and academicians (Ruspini, 1999) and that is why this research also used cross-sectional approach for data collection. Besides, as researcher in this research is using survey strategy, and with survey strategy studies mostly use cross sectional method (Easterby-Smith et al., 2008; Robson, 2002).

### 3.2 Research Technique and Procedure

Figure 3-4 explains that what research technique and procedure was used in this study and why they were used to answer the research questions. Positivism philosophy was used which uses quantitative data collection methodology. Quantitative methodology collects data through questionnaire and that data is analyzed by using some quantitative statistical analysis methods.

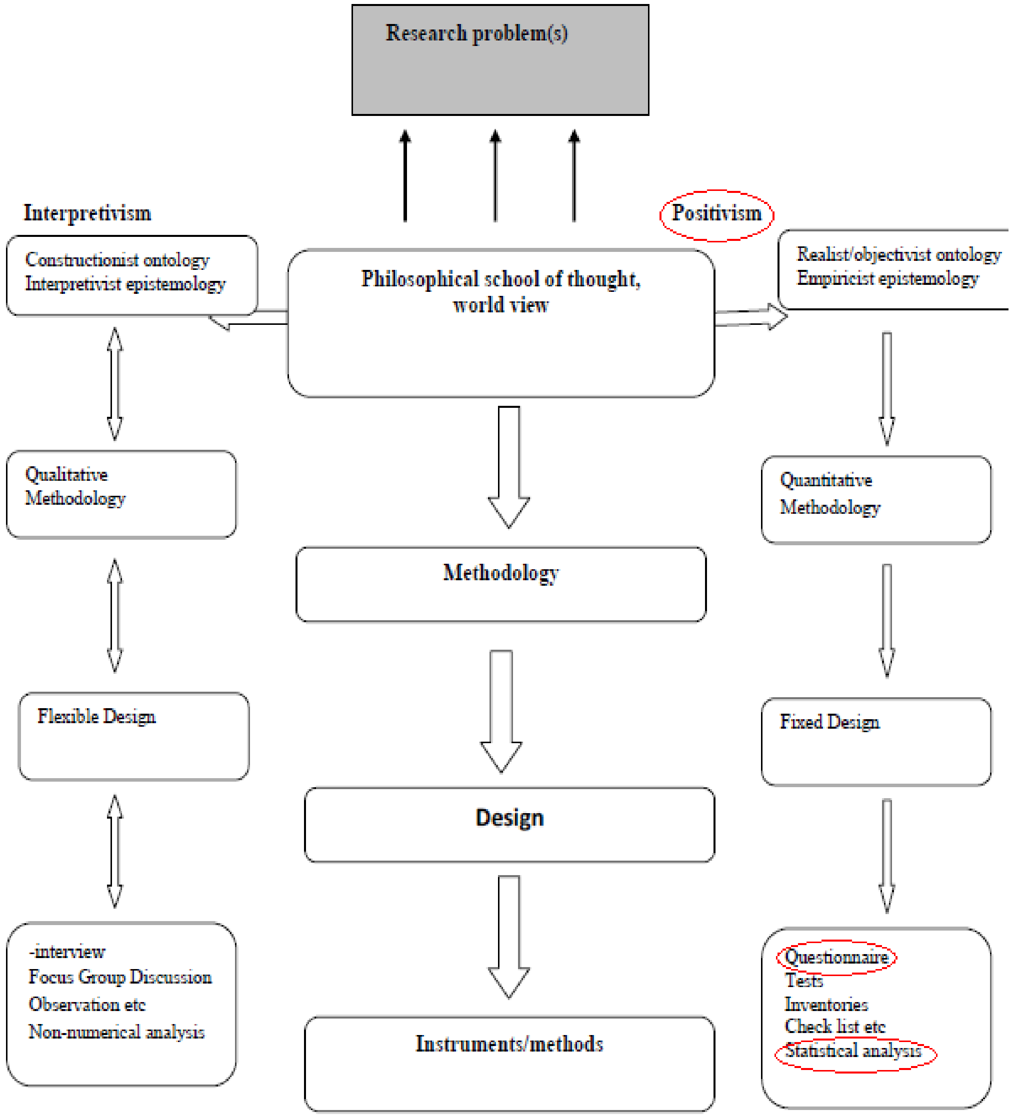


Figure 3-4: Research Technique and Procedure, Source: Tuli, (2010)

### 3.3 Purpose of Research

This study is descripto-explanatory (Sauders, Lewis and Thornhill, 2009, p. 140) in nature because it tries to find out the work design characteristics and personality traits of SEs. This portion comes under descriptive study "*to portray an accurate profile of persons, events or situations*" (Robson, 2002, p. 59) whereas at the same time, current study also tries to find out the effect of personality traits and work design characteristics of Software Engineers on their knowledge sharing behavior. In other words, what causes (personality traits, work design characteristics) knowledge sharing behavior of Software Engineers to increase or decrease (explanatory study). In addition, purpose of the research can be justified from the findings that this research is using questionnaire method to collect data which is often used in descriptive or explanatory studies (Sauders, Lewis and Thornhill, 2009, p. 362).

### 3.4 Type of Research

Research conducted with the intention of applying results to solve a specific problem currently being experienced in the organization is called applied research. Research done primarily to enhance the understanding of certain problem that commonly occur in organizational setting, and seek method of solving them is called basic or pure research (Sekaran, 2006, p.8). This is a basic research as it tries to find out the answer to the problem which various software development organizations face and that problem is how to increase knowledge sharing behavior of Software Engineers.

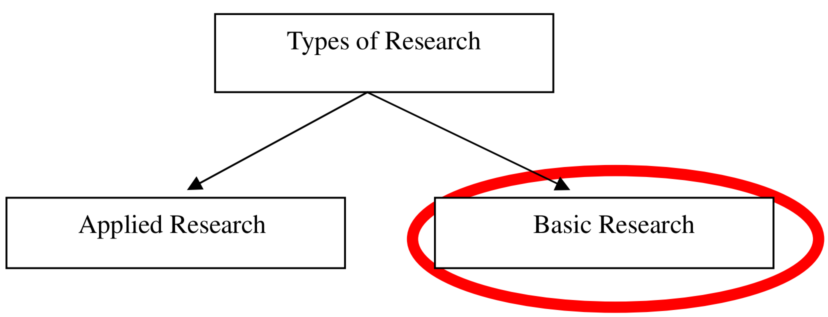


Figure 3-5: Research Type

### 3.5 Framework

Theoretical framework is the relationship among factors, which are important for the problem (Sekaran, 2003). Hypotheses can be formulated based on the framework and later on can be tested using various statistical methods (Jahangir, 2012). Theoretical framework for this study is shown in figure 3-6. This framework was developed after reviewing available literature. Although enough literature does not exist on the work design characteristics of Software Engineers and their knowledge sharing behavior, still effort was made to relate work design characteristics and knowledge sharing behavior among Software Engineers.

**Knowledge Sharing Framework for Software Engineers (KSFSE)**

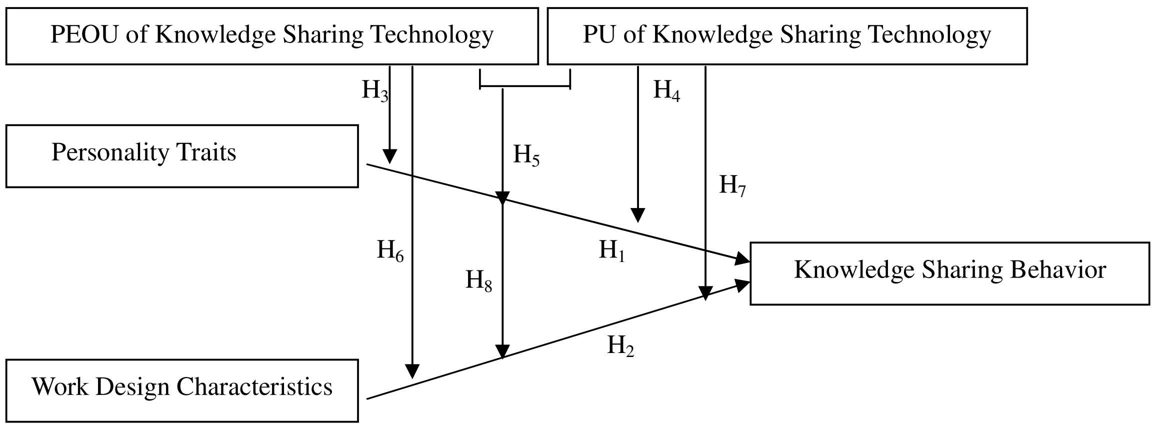


Figure 3-6: Theoretical Framework

### 3.6 Hypotheses

***<u>Research Question 1a:</u>*** No hypothesis required.

***<u>Research Question 1b:</u>*** How personality traits affect knowledge sharing behavior of Software Engineers (SEs)?

***$H_1$**: Personality traits affect Knowledge Sharing Behavior (KSB) of SEs.*

$H_{1a}$: Personality traits affect Explicit Knowledge Donation Behavior (EKDB) of SEs.
$H_{1b}$: Personality traits affect Explicit Knowledge Collection Behavior (EKCB) of SEs.
$H_{1c}$: Personality traits affect Implicit Knowledge Donation Behavior (IKDB) of SEs.
$H_{1d}$: Personality traits affect Implicit Knowledge Collection Behavior (IKCB) of SEs.

***<u>Research Question 2a:</u>*** No hypothesis required.

***<u>Research Question 2b:</u>*** How work design characteristics impact knowledge sharing behavior among Software Engineers?

***$H_2$****: Work design characteristics affect KSB of SEs.*

$H2_{a1}$: Task characteristics affect KSB of SEs.
$H2_{a2}$: Task characteristics affect EKDB of SEs.
$H2_{a3}$: Task characteristics affect EKCB of SEs.
$H2_{a4}$: Task characteristics affect IKDB of SEs.
$H2_{a5}$: Task characteristics affect IKCB of SEs.

$H2_{b1}$: Knowledge characteristics affect KSB of SEs.
$H2_{b2}$: Knowledge characteristics affect EKDB of SEs.
$H2_{b3}$: Knowledge characteristics affect EKCB of SEs.
$H2_{b4}$: Knowledge characteristics affect IKDB of SEs.
$H2_{b5}$: Knowledge characteristics affect IKCB of SEs.

$H2_{c1}$: Social characteristics affect KSB of SEs.
$H2_{c2}$: Social characteristics affect EKDB of SEs.
$H2_{c3}$: Social characteristics affect EKCB of SEs.
$H2_{c4}$: Social characteristics affect IKDB of SEs.
$H2_{c5}$: Social characteristics affect IKCB of SEs.

$H2_{d1}$: Contextual characteristics affect KSB of SEs.
$H2_{d2}$: Contextual characteristics affect EKDB of SEs.
$H2_{d3}$: Contextual characteristics affect EKCB of SEs.
$H2_{d4}$: Contextual characteristics affect IKDB of SEs.
$H2_{d5}$: Contextual characteristics affect IKCB of SEs.

***Research Question 3a:*** How technology acceptance perception (Perceived Ease of Use (PEOU) and Perceived Usefulness (PU)) moderates the relationship between personality traits and KSB?

***$H_3$**: PEOU moderates the relationship between personality traits and KSB of SEs.*

$H_{3a}$: PEOU moderates the relationship between personality traits and EKDB of SEs.
$H_{3b}$: PEOU moderates the relationship between personality traits and EKCB of SEs.
$H_{3c}$: PEOU moderates the relationship between personality traits and IKDB of SEs.
$H_{3d}$: PEOU moderates the relationship between personality traits and IKCB of SEs.

***$H_4$**: PU moderates the relationship between personality traits and KSB of SEs.*

$H_{4a}$: PU moderates the relationship between personality traits and EKDB of SEs.
$H_{4b}$: PU moderates the relationship between personality traits and EKCB of SEs.
$H_{4c}$: PU moderates the relationship between personality traits and IKDB of SEs.
$H_{4d}$: PU moderates the relationship between personality traits and IKCB of SEs.

***$H_5$**: PEOU and PU moderates the relationship between personality traits* and *KSB of SEs.*

$H_{5a}$: PEOU and PU moderates the relationship between personality traits and EKDB of SEs.
$H_{5b}$: PEOU and PU moderates the relationship between personality traits and EKCB of SEs.
$H_{5c}$: PEOU and PU moderates the relationship between personality traits and IKDB of SEs.
$H_{5d}$: PEOU and PU moderates the relationship between personality traits and IKCB of SEs.

***Research Question 3b:*** How technology acceptance perception (PEOU and PU) moderates the relationship between work design characteristics and KSB?

***H$_6$****: PEOU moderates the relationship between work design characteristics* and *KSB of SEs.*

$H_{6a1}$: PEOU moderates the relationship between task characteristics and KSB of SEs.
$H_{6a2}$: PEOU moderates the relationship between task characteristics and EKDB of SEs.
$H_{6a3}$: PEOU moderates the relationship between task characteristics and EKCB of SEs.
$H_{6a4}$: PEOU moderates the relationship between task characteristics and IKDB of SEs.
$H_{6a5}$: PEOU moderates the relationship between task characteristics and IKCB of SEs.

$H_{6b1}$: PEOU moderates the relationship between knowledge characteristics and KSB of SEs.
$H_{6b2}$: PEOU moderates the relationship between knowledge characteristics and EKDB of SEs.
$H_{6b3}$: PEOU moderates the relationship between knowledge characteristics and EKCB of SEs.
$H_{6b4}$: PEOU moderates the relationship between knowledge characteristics and IKDB of SEs.
$H_{6b5}$: PEOU moderates the relationship between knowledge characteristics and IKCB of SEs.

$H_{6c1}$: PEOU moderates the relationship between social characteristics and KSB of SEs.
$H_{6c2}$: PEOU moderates the relationship between social characteristics and EKDB of SEs.
$H_{6c3}$: PEOU moderates the relationship between social characteristics and EKCB of SEs.
$H_{6c4}$: PEOU moderates the relationship between social characteristics and IKDB of SEs.

$H_{6c5}$: PEOU moderates the relationship between social characteristics and IKCB of SEs.

$H_{6d1}$: PEOU moderates the relationship between contextual characteristics and KSB of SEs.
$H_{6d2}$: PEOU moderates the relationship between contextual characteristics and EKDB of SEs.
$H_{6d3}$: PEOU moderates the relationship between contextual characteristics and EKCB of SEs.
$H_{6d4}$: PEOU moderates the relationship between contextual characteristics and IKDB of SEs.
$H_{6d5}$: PEOU moderates the relationship between contextual characteristics and IKCB of SEs.

***H*$_7$*: PU moderates the relationship between work design characteristics and KSB of SEs.***

$H_{7a1}$: PU moderates the relationship between task characteristics and KSB of SEs.
$H_{7a2}$: PU moderates the relationship between task characteristics and EKDB of SEs.
$H_{7a3}$: PU moderates the relationship between task characteristics and EKCB of SEs.
$H_{7a4}$: PU moderates the relationship between task characteristics and IKDB of SEs.
$H_{7a5}$: PU moderates the relationship between task characteristics and IKCB of SEs.

$H_{7b1}$: PU moderates the relationship between knowledge characteristics and KSB of SEs.
$H_{7b2}$: PU moderates the relationship between knowledge characteristics and EKDB of SEs.
$H_{7b3}$: PU moderates the relationship between knowledge characteristics and EKCB of SEs.
$H_{7b4}$: PU moderates the relationship between knowledge characteristics and IKDB of SEs.

$H_{7b5}$: PU moderates the relationship between knowledge characteristics and IKCB of SEs.

$H_{7c1}$: PU moderates the relationship between social characteristics and KSB of SEs.
$H_{7c2}$: PU moderates the relationship between social characteristics and EKDB of SEs.
$H_{7c3}$: PU moderates the relationship between social characteristics and EKCB of SEs.
$H_{7c4}$: PU moderates the relationship between social characteristics and IKDB of SEs.
$H_{7c5}$: PU moderates the relationship between social characteristics and IKCB of SEs.

$H_{7d1}$: PU moderates the relationship between contextual characteristics and KSB of SEs.
$H_{7d2}$: PU moderates the relationship between contextual characteristics and EKDB of SEs.
$H_{7d3}$: PU moderates the relationship between contextual characteristics and EKCB of SEs.
$H_{7d4}$: PU moderates the relationship between contextual characteristics and IKDB of SEs.
$H_{7d5}$: PU moderates the relationship between contextual characteristics and IKCB of SEs.

***H*$_8$*: PEOU and PU moderates the relationship between work design characteristics and KSB of SEs.*

$H_{8a1}$: PEOU and PU moderates the relationship between task characteristics and KSB of SEs.
$H_{8a2}$: PEOU and PU moderates the relationship between task characteristics and EKDB of SEs.
$H_{8a3}$: PEOU and PU moderates the relationship between task characteristics and EKCB of SEs.
$H_{8a4}$: PEOU and PU moderates the relationship between task characteristics and IKDB of SEs.
$H_{8a5}$: PEOU and PU moderates the relationship between task characteristics and IKCB of SEs.

$H_{8b1}$: PEOU and PU moderates the relationship between knowledge characteristics and KSB of SEs.

$H_{8b2}$: PEOU and PU moderates the relationship between knowledge characteristics and EKDB of SEs.

$H_{8b3}$: PEOU and PU moderates the relationship between knowledge characteristics and EKCB of SEs.

$H_{8b4}$: PEOU and PU moderates the relationship between knowledge characteristics and IKDB of SEs.

$H_{8b5}$: PEOU and PU moderates the relationship between knowledge characteristics and IKCB of SEs.

$H_{8c1}$: PEOU and PU moderates the relationship between social characteristics and KSB of SEs.

$H_{8c2}$: PEOU and PU moderates the relationship between social characteristics and EKDB of SEs.

$H_{8c3}$: PEOU and PU moderates the relationship between social characteristics and EKCB of SEs.

$H_{8c4}$: PEOU and PU moderates the relationship between social characteristics and IKDB of SEs.

$H_{8c5}$: PEOU and PU moderates the relationship between social characteristics and IKCB of SEs.

$H_{8d1}$: PEOU and PU moderates the relationship between contextual characteristics and KSB of SEs.

$H_{8d2}$: PEOU and PU moderates the relationship between contextual characteristics and EKDB of SEs.

$H_{8d3}$: PEOU and PU moderates the relationship between contextual characteristics and EKCB of SEs.

$H_{8d4}$: PEOU and PU moderates the relationship between contextual characteristics and IKDB of SEs.

$H_{8d5}$: PEOU and PU moderates the relationship between contextual characteristics and IKCB of SEs.

### 3.7 Factors Development

Table 3-1 show the variables used in forming the framework. Variables are categorized into observed variables and then into first order, second order, third order and fourth order variables. This categorization of variables into different orders is followed from a study done by Jehangir (2012) and is also mentioned in the research model by Bock et al., (2005). Based on this categorization, observed variables are those variables which are directly measured and questions will be asked related to these variables. Observed variables are the sub-components/dimensions of first order variables. First order variables are the sub-components/dimensions of second order variables and so on. First order variables include big five personality traits, autonomy, task characteristics, knowledge characteristics, social characteristics, interdependence, contextual characteristics, perception towards Knowledge Sharing Technology (KST) and knowledge sharing behavior. Second order variables include task characteristics, work design characteristics, motivational characteristics and social characteristics. Third order variables include motivational characteristics and work design characteristic. Only one variable is fourth order variable and that is work design characteristics.

Table 3-1: Development of Factors

| **Observed Variables** | **First Order Factors** | **Second Order Factors** | **Third Order Factors** | **Fourth Order Factors** |
|---|---|---|---|---|
| Openness to Experience | Big Five Personality Traits | N/A | N/A | N/A |
| Neuroticism | * | N/A | N/A | N/A |
| Extraversion | * | N/A | N/A | N/A |
| Conscientiousness | * | N/A | N/A | N/A |
| Agreeableness | * | N/A | N/A | N/A |
| Work Schedule Autonomy | Autonomy | Task Characteristics | Motivational Characteristics | Work Design Characteristics |
| Decision Making Autonomy | * | * | * | * |
| Work Methods Autonomy | * | * | * | * |
| Task variety | Task Characteristics | Motivational Characteristics | Work Design Characteristics | N/A |
| Task Significance | * | * | * | N/A |
| Task Identity | * | * | * | N/A |

| Observed Variables | First Order Factors | Second Order Factors | Third Order Factors | Fourth Order Factors |
|---|---|---|---|---|
| Feedback from Job | * | * | * | N/A |
| Job Complexity | Knowledge Characteristics | Motivational Characteristics | Work Design Characteristics | N/A |
| Information Processing | * | * | * | N/A |
| Problem Solving | * | * | * | N/A |
| Skill Variety | * | * | * | N/A |
| Specialization | * | * | * | N/A |
| Social Support | Social Characteristics | Work Design Characteristics | N/A | N/A |
| Initiated | Interdependence | Social Characteristics | Work Design Characteristics | N/A |
| Received | * | * | * | N/A |
| Feedback from Others | Social Characteristics | Work Design Characteristics | N/A | N/A |
| Physical Demands | Contextual Characteristics | * | N/A | N/A |
| Work Conditions | * | * | N/A | N/A |
| Equipment Use | * | * | N/A | N/A |
| Perceived Ease of Use (PEOU) | Perception towards Knowledge Sharing Technology | N/A | N/A | N/A |
| Perceived Usefulness (PU) | * | N/A | N/A | N/A |
| Explicit Knowledge Donation Behavior (EKDB) | Knowledge Sharing Behavior | N/A | N/A | N/A |
| Explicit Knowledge Collection Behavior (EKCB) | * | N/A | N/A | N/A |
| Implicit Knowledge Donation Behavior (IKDB) | * | N/A | N/A | N/A |
| Implicit Knowledge Collection Behavior (IKCB) | * | N/A | N/A | N/A |

N/A= Not Applicable, *=same as above

## 3.8 Instrument Development

Figures 3-7 to 3-10 show that how instrument/items for various variables were developed. These figures include the name of observed variable, number of items to measure those variables and from where those items were taken (source).

### *3.8.1 Work Design Characteristics*

Figure 3-7 show the observed variables, first order, second order, third order and fourth order components of work design characteristics. Work design characteristics are measured through motivational characteristics (task and knowledge characteristics); social characteristics and contextual characteristics. Further categorization of each dimension is shown through figure 3-7.

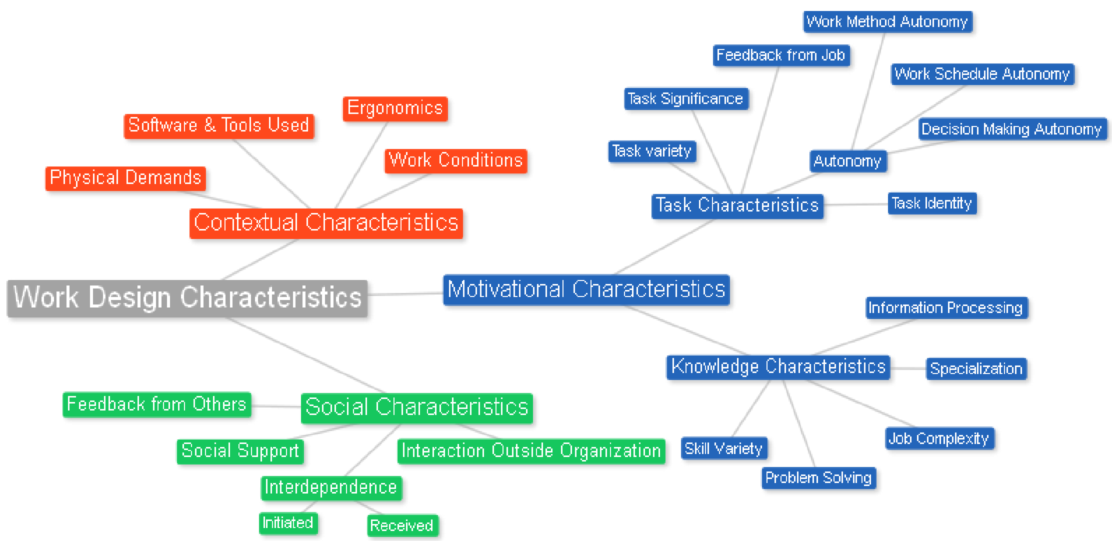


Figure 3-7: Dimensions of Work Design Characteristics

Figure 3-7a show the number of items used to measure each dimension of work design characteristics. Motivational characteristics which consist of task (24 items) and knowledge characteristics (20 items) were measured through 44 items in total. Social characteristics were measured through 19 items and contextual characteristics were measured through 14 items. Figure 3-7a also shows the source of these items from where they are taken.

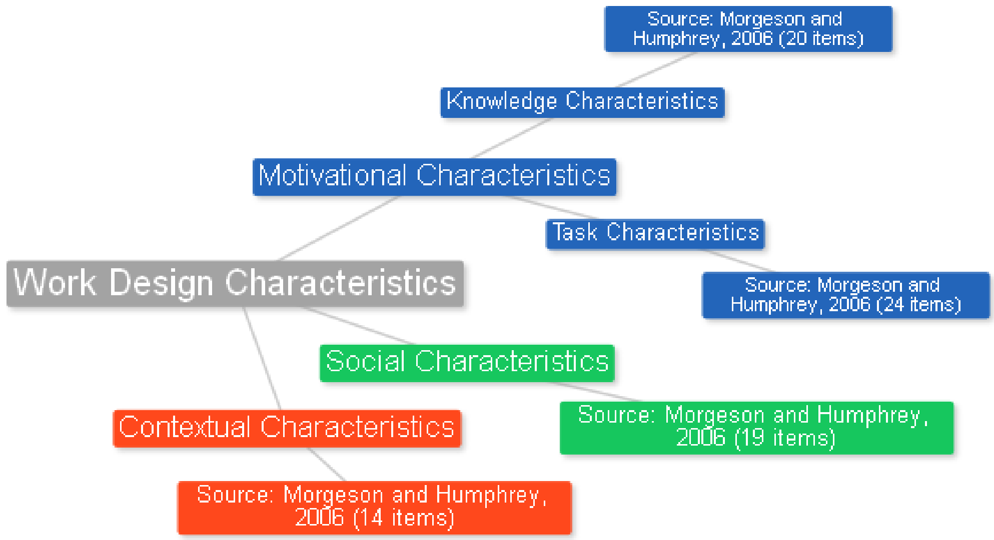


Figure 3-7a: Number of items for work design characteristic dimensions and source

Figure 3-7b is the detail of task characteristic's sub-dimensions and their number of items. Task characteristics are further categorized into autonomy (work schedule: 3 items, decision making: 3 items, work method: 3 items), task variety (4 items), feedback from job (3 items), task identity (4 items) and task significance (4 items).

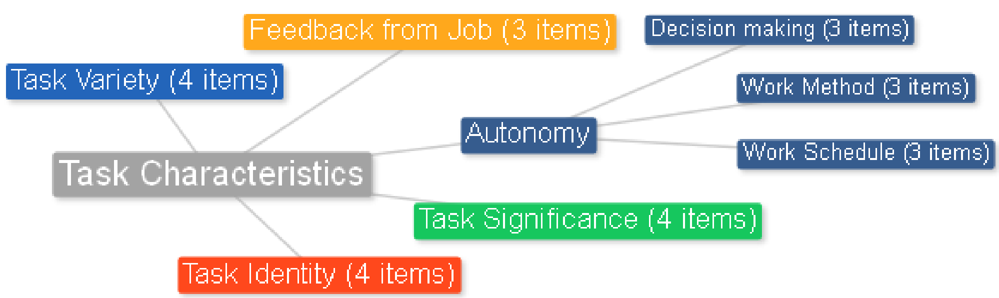


Figure 3-7b: Number of items for task characteristic dimensions

Figure 3-7c is the categorization of items for knowledge characteristics. Knowledge characteristics are categorized into job complexity (4 items), information processing (4 items), specialization (4 items), skill variety (4 items) and problem solving (4 items).

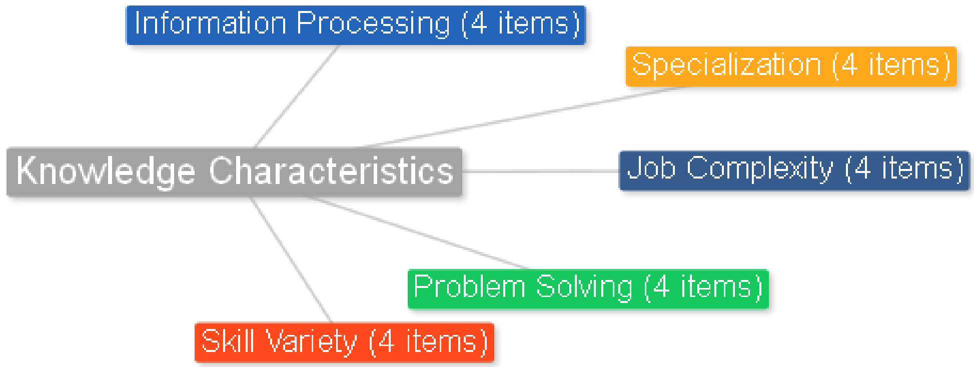


Figure 3-7c: Number of items for knowledge characteristic dimensions

Figure 3-7d is the categorization of items for contextual characteristics. These characteristics are categorized into ergonomics (3 items), physical demands (3 items), software and tools used (adapted from equipment use) (3 items) and work conditions (5 items).

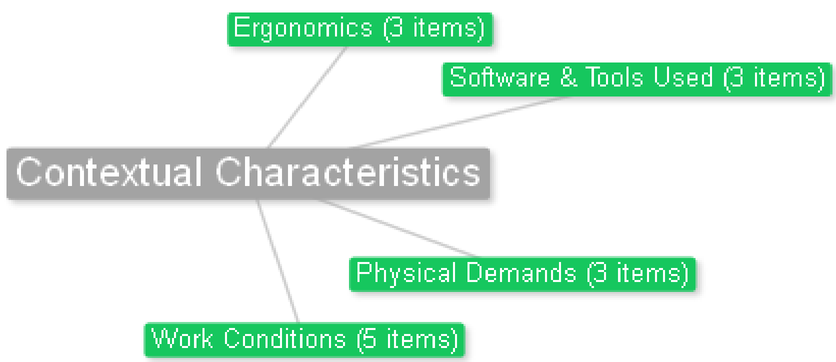


Figure 3-7d: Number of items for contextual characteristic dimensions

Figure 3-7e is about social characteristics. Social characteristics were measured through social support (6 items), interdependence (initiated: 3 items, received: 3 items), feedback from others (3 items) and interaction outside organization (4 items).


Figure 3-7e: Number of items for social characteristic dimensions

### *3.8.2 Big Five Personality Traits*

Big five personality traits were measured through neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. The number of items used to measure these dimensions and their sources are mentioned in figure 3-8.

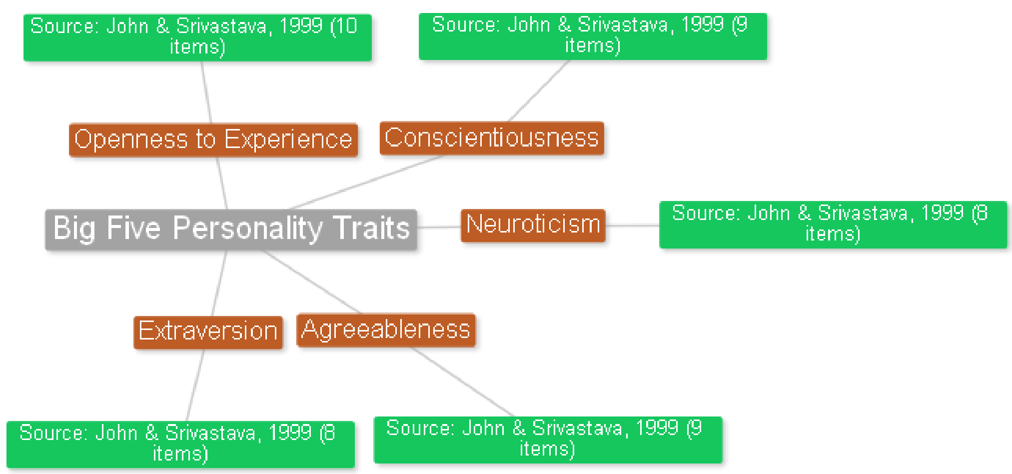


Figure 3-8: Number of items for big five personality traits and their source

### *3.8.3 Perceived Ease of Use and Usefulness*

Perception towards accepting knowledge sharing technology was measured through PEOU and PU. Figure 3-9 highlights the number of items used to measure PEOU and PU and the source from where these items were adapted for this study.


Figure 3-9: Number of items for PEOU and PU and their source

### *3.8.4 Knowledge Sharing Behavior*

Figure 3-10 show the division of KSB into explicit and implicit knowledge donation behavior and explicit and implicit knowledge collection behavior. This figure also mentions the number of items used to measure each sub-dimension and the source from where these items were taken. In this figure, author's contribution means that these items were developed during this research. Earlier, there were no items to measure KSB of software developers. Therefore, during this research, Knowledge Units (KUs) necessary for software developers were identified from SWEBOK, (2004). Based on those KUs and their description, items to measure KSB specific to software developers were developed. Otherwise, previous studies used general KSB items rather than focusing specifically on KUs.

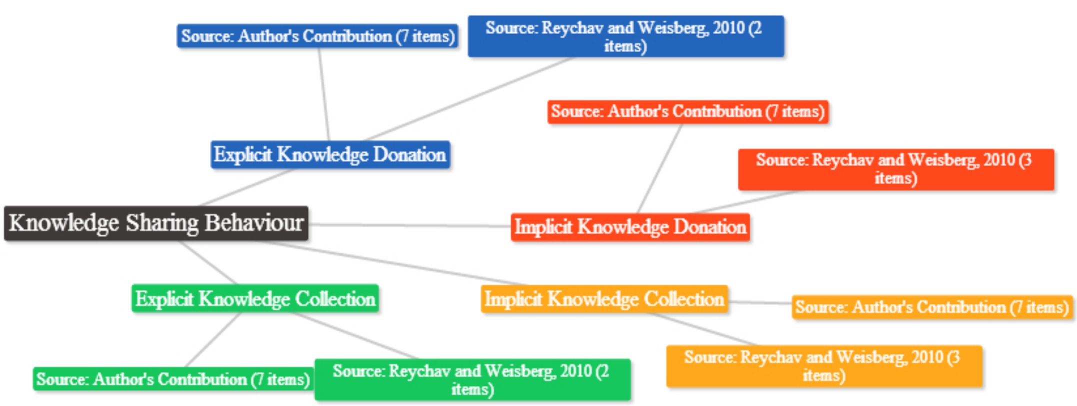


Figure 3-10: Number of items for knowledge sharing behavior dimensions and their source

### 3.9 Sampling Technique and Sample Size

This study followed the process for selection of sample mentioned in Zikmund, (2003, p. 372). This process consists of seven stages.

*Step 1: Define the target population*

Target population is the complete set of elements which can be part of a particular research (Zikmund, 2003, p. 373). This can be done by focusing on the characteristics of the source from whom researcher wish to collect the data. In this case, target population is Software Engineers (those who will be involved in coding only) from Small and Medium Enterprises (SMEs) of Malaysia. Unfortunately there is no segregation among various Software Engineers based on their characteristics (jobs they perform like software designers, software coders, software testers etc.) therefore this research took the whole population of Software Engineers as population and calculated the sample size. However, before sending the questionnaire, it was personally assured by the author that the person who fills the questionnaire is the one who is software coder. Entire population was used just to calculate sample size whereas data was collected from the actual software developers (coders).

SMEs were selected because they are the backbone for economic growth of every country (Sharif et al., 2013). Since SMEs are vital for the development of a country therefore same is the case with Malaysia. Malaysian SMEs are operating in manufacturing; agriculture and services sectors (including ICT services). Importance of SMEs is evident from the fact that there are 645,136 SMEs currently operating in Malaysia and 90% of these SMEs are operating in services sector (including ICT). Another important fact about Malaysian SMEs is that from total business organizations, whether small or large, 97.3% are categorized as SMEs. These SMEs are contributing 19% of the total Malaysian exports and are providing employment to 57% employees. Total sales of IT companies with MSC status is RM 12,581 million (MSC Malaysia, 2009b). Besides benefiting economy of Malaysia in monetary terms, these SMEs are employing a huge number of employees as well. Demand of manpower for these ICT related companies in 2012 was 293,703 (MSC Malaysia, 2009a). From this, software development employees formed a major portion and with 8% expected growth, this sector (software development) required 115,211 employees in 2012 (MSC Malaysia, 2009a).

*Step 2: Select a sampling frame*

*"A sampling frame is the list of elements from which the sample may be drawn"* (Zikmund, 2003*, p. 373).* Therefore, Software Engineers working in SMEs of Malaysian software industry were the elements of sampling frame.

*Step 3: Determine if a probability or non-probability sampling method will be used*

Sampling technique can be either probability (representative sampling) or non-probability (judgmental sampling) (Sauders, Lewis and Thornhill, 2009). Although probability is preferred still sometimes, non-probability sampling is best suited to a researcher (Zikmund et al., 2010). However, in this research, probability sampling method was used. As in probability sampling, every element of population has a known, non-zero probability of being selected.

This research used random cluster and simple random sampling methods. Both of these are probability sampling techniques. Since no categorization of Software Engineers was available, the researcher himself first made sure that only those Software Engineers are selected whose job is to code software. Therefore, only software coders (which are referred as Software Engineers in this study) were approached.

*Step 4: Plan procedure for selecting sampling units*

A single element of the population, which can be selected, is sampling unit (Zikmund, 2003, p. 375). In this research, sampling units were not categorized based on more than one criterion.

Since SMEs are located throughout Malaysia and it was difficult to approach all Software Engineers from whole Malaysia because software SMEs are spread all over Malaysia therefore simple random cluster sampling was used first to identify the geographical area. This helps researcher(s) to focus on few areas. Another reason due to which simple random cluster sampling was used was that since a complete list of Malaysian Software Engineers was not available therefore it was not possible for researcher to apply probability sampling without complete sampling frame. Due to these limitations, simple random cluster sampling was used. Sixteen clusters were created depending on geography (because of 13 states and 3 federal territories). Then four locations were randomly selected. Four selected locations were Pahang, Penang, Perak and Kuala Lumpur. Companies performing software development activities in these areas were selected from http://www.smecorp.gov.my (144 companies selected and numbered from 1-144 for using simple random sampling), http://www.smeinfo.com.my (924 companies selected and numbered from 145-1068 for using simple random sampling) and http://www.701pages.com (81 companies selected and numbered from 1069-1149 for using simple random sampling). Reason for selecting these websites is that one can easily find the contact information of SMEs from here (more detail about companies on these websites can be found in Appendix R). From these websites, it was found that there are 1,149 SMEs who have employed Software Engineers because of their business activities. From these, 667 SMEs were contacted to participate in this research and 279 companies agreed. These 279 SMEs had 1,964 employees as Software Engineers. From these 1.964 engineers, 1,237 (randomly selected) were given questionnaire (Software Engineers approached were almost three times of sample size to increase response rate).

*Step 5: Determine Sample Size*

Appropriate sample size is necessary to have confidence on the results obtained through that sample size. Question is how much should be the sample size? There are various criteria to measure sample size and one of the criteria is confidence interval. Since total population for software developers in 2012 was expected to be 115,211 therefore with confidence level of 95% and confidence interval 5%, appropriate sample size would be 383. Formula used to calculate sample size was:

$s = (X^2*N*P*(1-P)) / ((d^2*(N-1))+(X^2*P*(1-P)))$…………………………….(i)

s = required sample size

$X^2$ = the table value of chi-square for 1 degree of freedom at the desired confidence level (.05 = 3.841)

*N* = the population size

*P* = the population proportion (assumed to be .50 since this would provide the maximum sample size)

*d* = the degree of accuracy expressed as a proportion (.05)

There are some studies as well which explains about the minimum sample size. Like, some say that 100 should be the minimum sample size (Gorsuch, 1983; Kline, 1979, p. 40), some say 150 (Hutcheson and Sofroniou, 1999), some favor 200 (Guilford, 1954, p. 533), 250 (Catell, 1978), 300 (Nouris, 2005, p, 400) and even 500 (Comrey and Lee, 1992).

This research followed both approaches. One by calculating sample size through confidence level and interval method and also by following Nouris, (2005, p. 400) who mentioned that sample size should be at least 300. The reason for selecting this method is that collecting data from 500 respondents is not an easy task, both in terms of time and cost. Besides, it exceeds the minimum criteria (100, 200, 250) set by other researchers and Comrey and Lee, (1992) who said that minimum sample size should be 500 also mentioned that 300 is a good sample size. This criterion of minimum 300 sample size also exceeds the rule "*ratio of 2*". This rule says that there should be at least twice the number of respondents than the number of variables.

*Step 6: Select actual sample sampling units*

As target population is not divided into any units (further categorized based on their characteristics), the sampling unit in this study will be software developers (individual).

*Step 7: Conduct fieldwork*

A fieldworker is the person who collects data from respondents (Zikmund, 2003, p. 435) and in this case, author of this research himself is the fieldworker. Fieldwork was conducted through online and offline data collection methods.

Data can be collected either from all the "*cases or elements"* of a population or only from a selected number of *cases or elements*. It is very difficult for any researcher to collect data from all the "*cases or elements"* of a population therefore researchers use sampling to select a "*sample"* from the overall population. This sample will present the *population* (Saunders, Lewis and Thornhill, 2009, p. 210, 212).

## 3.10 Pilot Study

Pilot study is a small-scale study with similar kind of respondents who will be used in actual study and this helps to refine survey questions. Pilot study is also known as pretest (Zikmund, Babin, Carr and Griffin, 2010, p. 65). Pilot studies help the actual respondents (in larger study) to understand the question and they will have no problem in answering that question (Saunders, Lewis and Thornhill, 2009, p. 394). For a small study (student questionnaires), a pilot study with 10 respondents should be enough (Fink, 2003b). Even if researcher does not have enough time for pilot study, he/she should at least do pilot study of survey through friends or family members but it should be done rather than not doing it all (Saunders, Lewis and Thornhill, 2009, p. 394).

Before pilot study, questionnaire should be sent to some experts who will comment on the "*representativeness*" and "*suitability*" of questions (Saunders, Lewis and Thornhill, 2009, p. 394).

Pilot study was also conducted for this research. In this pilot study, 13 people participated. Demographic information of pilot study's respondents is presented in table 3-2.

Table 3-2: Demographic Information of Pilot Study

| Gender | Frequency | Percent | Valid Percent |
|---|---|---|---|
| Male | 9 | 69.2 | 69.2 |
| Female | 4 | 30.8 | 30.8 |
| **Employment Status** | | | |
| Permanent | 3 | 23.1 | 23.1 |
| Contract | 10 | 76.9 | 76.9 |
| **Ethnicity** | | | |
| Malay | 7 | 53.8 | 53.8 |
| Chinese | 3 | 23.1 | 23.1 |
| Indian | 3 | 23.1 | 23.1 |
| Others | - | - | - |
| **Highest Qualification in Software Engineering/Development** | | | |
| Diploma | 1 | 7.7 | 7.7 |
| First Degree | 9 | 69.2 | 69.2 |
| Master Degree or Above | 3 | 23.1 | 23.1 |
| Others | - | - | - |
| **Work Schedule** | | | |
| Regular | 9 | 69.2 | 69.2 |
| Flexing Working Hours | 4 | 30.8 | 30.8 |
| **Current Work Location** | | | |
| Perak | 1 | 7.7 | 7.7 |
| Penang | 6 | 46.2 | 46.2 |
| Kuala Lumpur | 5 | 38.5 | 38.5 |
| Pahang | 1 | 7.7 | 7.7 |
| **Experience in Software Development (years)** | | | |
| Less than 2 | 4 | 30.8 | 30.8 |
| 2 - 5 | 5 | 38.5 | 38.5 |
| 6 - 9 | 3 | 23.1 | 23.1 |
| 10 or more | 1 | 7.7 | 7.7 |
| **Methodology** | | | |
| Extreme Programming (XP) | 2 | 15.4 | 15.4 |
| Scrum | - | - | - |
| Feature Driven Development (FDD) | - | - | - |
| Agile Modeling | 3 | 23.1 | 23.1 |
| Pair Programming | 3 | 23.1 | 23.1 |
| Rational Unified Process | 1 | 7.7 | 7.7 |
| Waterfall | 2 | 15.4 | 15.4 |
| Spiral | 1 | 7.7 | 7.7 |
| Incremental | 1 | 7.7 | 7.7 |
| Prototype | - | - | - |
| Others | - | - | - |

Most of the pilot study participants were male (69.2%). Female participation was 30.8%. People who were on contractual basis formed 76.9% of the respondents whereas 23.1% were permanent employees. Majority of respondents were with Malay ethnicity (53.8%). Most of the respondents were from Penang (46.2%) and had experience of 2-5 years (38.5%).

Validity and reliability tests for pilot study were not conducted because all the instruments were taken from very well validated studies. Like, instrument to measure work design characteristics was taken from Morgeson and Humphrey, (2006). This study has been cited 435 times. Similarly, personality traits were measured by using the instrument from John and Srivastava, (1999) and this work is cited by 3,262 studies. Items to measure PEOU and PU were adapted from the study by Davis, (1985). This study has been cited 18,885 times. Knowledge Sharing Behavior items were adopted from Reychav and Weisberg, (2010) and is cited 34 times. All these citations are correct as on 26$^{th}$ March, 2014. However, to make these instruments suitable for Malaysian culture, validity and reliability process was applied which was adopted from Dillman, (2000). Details of this process that how it was applied are discussed in Section 3.15 (Chapter: 3).

## 3.11 Results of Pilot Study and Pretest

### *3.11.1 Changes in the Specific Knowledge Sharing Behavior Section*

Table 3-3: Changes during Pilot Study and Pretest

| Original Items | Changes Suggested and Done Accordingly |
|---|---|
| I **SHARE** reports and documents about ... | |
| …translating a software design into an implementation programming language | …translating software specifications into an executable code |
| …modular and incremental programming, structured programming, and knowledge of various programming paradigms (assembly, procedural, object-oriented, functional, and logic) | ...various process models such as incremental, prototype, spiral etc., and of various programming paradigms (structured, assembly, procedural, object-oriented, and logic) |
| …source code development tools and programming language translation tool | ...how to use source code development tools (IDEs) and specification to code translation tools |
| …developing code by reuse of existing components and about developing reusable code | ...generating reusable code and about reusability of code |
| …reusable libraries, the inheritance mechanism, module referencing, and software probability issues and techniques | ...reusable libraries, off the shelf software components, module referencing, and software portability issues and techniques |
| …developing internal and external program documentation | ...writing comments on the code/program for understanding and preparing external program documentation |
| …standards for style and documentation in the construction of software | ...use of standardized documentation techniques during the software development process |

### *3.11.2 Some other Changes*

Table 3-3a: Changes During Pilot Study and Pretest

| Original Question | Changes Suggested and Done Accordingly |
|---|---|
| **8. Which methodology do you mostly use for software development (<u>tick ONE only</u>)?**<br>☉ Extreme Programming (XP)<br>☐ Scrum<br>☐ Feature Driven Development (FDD)<br>☐ Agile Modeling<br>☐ Pair Programming<br>☐ Rational Unified Process<br>☐ Waterfall<br>☐ Spiral ☐ Incremental ☐ Prototype | Which of the following do you mostly use for software development (**tick ONE only**)?<br>☐ Traditional Methods (Waterfall, Spiral, Prototype, Incremental etc.)<br>☐ Agile (Extreme Programming, Pair Programming, Scrum etc.) |

| Original Question | Changes Suggested and Done Accordingly |
|---|---|
| ✓ Provide space to answer for OTHER option.<br><br>✓ Use MY word instead of THE e.g., My job instead of The job | DONE<br><br>DONE |
| Remove *knowledge of* from KSB Section.<br><br>I **<u>COLLECT</u>** reports and documents about....<br><br>knowledge of various process models such as incremental, prototype, spiral etc., and of various programming paradigms (structured, assembly, procedural, object-oriented and logic) | **I <u>COLLECT</u> reports and documents about....**<br><br>…various process models such as incremental, prototype, spiral etc., and of various programming paradigms (structured, assembly, procedural, object-oriented, and logic). |
| Highest education gained:<br>☐ Certificate ☐ Diploma<br>☐ First degree ☐ Master degree or above<br>☐ Others (Please mention): ___________________ | Highest education gained:<br>☐ Professional Diploma or Certificate<br>☐ First degree ☐ Master degree or above<br>☐ Others (Please mention): ___________________ |
| ✓ Change Work Location to Current Work Location | DONE |
| Two statements missing from ergonomic and tools and software used section<br><br>✓ The climate at the work place is comfortable in terms of temperature and humidity.<br><br>✓ A lot of time was required to learn the tools and softwares used on the job | <br><br>ADDED in Questionnaire<br><br>ADDED in Questionnaire |

## 3.12 Data Collection Method

Survey is a research technique in which data is collected from respondents through questionnaire and it is the most common method of collecting primary data (Zikmund, 2003, p. 66). Although there is no "*best*" form of any survey but all forms have their own advantages and disadvantages (Zikmund, 2003, p. 227).

This research used self-administrative postal and online questionnaire methods because most of the cross-sectional studies use survey method (Easterby-Smith, Golden-Biddle and Locke, 2008; Robson, 2002). Besides, postal and internet based questionnaires were used because of the following reasons:

Internet surveys offer high speed for data collection, high geographic flexibility, versatility of questions, low or zero item non-response rate, anonymity of respondent and low cost. Similarly, postal questionnaires offer high geographic flexibility, high anonymity of respondent and low cost (Zikmund, 2003, p. 228).

Another issue with data collection is low response rate. To maximize the response rate, there are various methods to be used and one of those methods is contact (Saunders, Lewis and Thornhill, 2009, p. 396). Respondents were contacted before the questionnaire was sent to them and were also reminded to fill the questionnaire through follow up contact. Pre and follow-up contact has a medium effect on the response rate if not very high.

Questionnaire was posted on website (www.surveygizmo.com) during February – April, 2012. In total, 336 questionnaires were completed online during this period. None of these questionnaires were incomplete as all the questions were marked mandatory and respondents could not leave any question unanswered, which is one of the advantages of using online surveys (Zikmund, 2003, p. 228). Forty-eight other questionnaires were received through postal service during the same period. So in total, 384 usable questionnaires were received. Summary of response rate is shown in tables 3-4 and 3-4a.

### 3.13 Response Rate

Table 3-4 and 3-4a present the response rate details for online and postal methods.

Table 3-4: Response Rate

| | **Online** | **Postal** | **Total** |
|---|---|---|---|
| Total Questionnaire Send | 1015 | 222 | 1237 |
| Out of Scope | 7 | 3 | 10 |
| Total Questionnaires to Calculate Response Rate | 1008 | 219 | 1227 |
| Valid Responses | 336 | 48 | 384 |
| Refusal | 30 | 15 | 45 |
| Incomplete | 0 | 27 | 27 |
| Could not Contact/Sample Loss | 11 | 34 | 45 |

Table 3-4a: Overall Response Rate

| | **Response Rate (%)** |
|---|---|
| Online | 33.33 |
| Postal | 21.92 |
| Total | 31.29 |

### 3.14 Respondents

Respondents for this study were Software Engineers (software coders). In total, 384 valid responses were received. Demographic information of these respondents is shown in table 3-5. Majority of the respondents were male (81.7%); with Malay ethnicity (51.8%) and had first/Bachelor degree (82.6%) as their highest qualification. Most of the respondents were currently working in Penang (42%) followed by Kuala Lumpur (31.7%). More than 48% Software Engineers had 2-5 years of experience which shows that the feedback is reliable as the respondents had good experience in their field.

Table 3-5: Demographic Information

| Demographic Information | |
|---|---|
| **Gender** | **Percentage** |
| Male | 81.7 |
| Female | 18.3 |
| **Employment Status** | |
| Permanent | 8.6 |
| Contract | 91.4 |
| **Ethnicity** | **Percentage** |
| Malay | 51.8 |
| Chinese | 29.1 |
| Indian | 19.1 |
| Others | - |
| **Highest Education** | |
| Diploma and Professional Certification | 3.3 |
| First/Bachelor Degree | 82.6 |
| Master's Degree | 14.1 |
| Others | - |
| **Work Schedule** | |
| Regular | 93.5 |
| Flexible | 6.5 |
| **Current Work Location** | |
| Perak | 21.1 |
| Penang | 42.0 |
| Kuala Lumpur | 31.7 |
| Pahang | 5.2 |
| **Experience** | |
| Less than 2 years | 24.0 |
| 2-5 | 48.4 |
| 6-9 | 18.7 |
| 10 or above | 8.9 |
| **Methodology** | |
| Agile | 57.6 |
| Others | 42.4 |

## 3.15 Designing the Survey Instrument

A survey needs to be valid in order to be a good survey. There are numerous methods defined by researchers to measure the validity and reliability of the questionnaire. One of those methods was from Dillman, (2000). This method consists of four stages namely content validity, readability, pilot study and mistake elimination.

*Stage-1 - Content validity*

"*Refers to the extent to which the measurement device (questionnaire), provides adequate coverage of the investigative questions*" (Saunders, Lewis and Thornhill, 2009). At first stage of content validation, researcher himself, one senior lecturer and one associate professor modified the questionnaire. As the questionnaire was taken from well-validated studies, therefore, not enough changes were required but still, the first draft was revised three times. Content validation was done by keeping the following points in mind:

1. To assess that whether the items in questionnaire to measure a specific variable need some modification or not.
2. Remove any such items, which seems not to be useful or are repetition.
3. Whether the scale used to measure the items in the questionnaire is appropriate or not.
4. To estimate the pitfalls of the sections used in the instrument.

*Stage Two: Readability*

This stage helps to enhance the readability or clarification of questions to respondents. This is crucial because this will enhance the chances that whatever researcher is asking, respondent will understand the same thing. At times it happen that researcher is asking one thing but respondent may understand something else due to difference in language, culture or level of understanding of that particular language. To enhance the readability of the questionnaire, following criteria were set:

1. The words used in the instrument are understandable to respondents in Malaysian culture.
2. The questions are equally interpreted by the respondents as there are different ethnicities so effort was made that every person can understand and interpret the question in the same way as others do.
3. Length of the statements and use of simple appropriate words were also considered in order to increase the clarity.

In total, five people were involved during this stage. As the main portions of the questionnaire are from organizational behavior and personality factors, therefore one senior lecturer from organization behavior (experience: 3 years and above), one psychologist (experience: 3 years and above) was requested to comment on the readability of the questionnaire. Once the recommendations from these two people were done, questionnaire was sent to three software developers (coders) (one Malay, one Chinese and one Indian, as these are the three main dominant communities in Malaysia) who all had more than 5 years of experience in this field to have another look at the questionnaire. This was necessary as software developers are technical people and it might be difficult for them to answer questions from behavioral or social perspective.

*Stage 3: Pilot Study*

Pilot study was also conducted. In order to see the results of pilot study, please refer to Section 3.10 and 3.11.

*Stage 4: Mistake Elimination*

In the final stage, the modified instrument was examined by one senior lecturer (experience: 3 years and above) and one associate professor (experience: 8 years and above). This stage was necessary just to have a final look at the questionnaire before sending it for field work. Details about the questionnaire, items used to measure variables can be found in Appendix J, K, L, M, N and O.

## 3.16 Pre-testing

Pretesting is used to see the readability and understandability of the instrument. Pretesting can be done through colleagues who have knowledge in that particular area and other known individuals (Baker, 2003). Results of pretesting and pilot study are combined in section 3.11a.

## 3.17 Validity Assessment

From validity of questionnaire researcher will see that whether questions or items in the questionnaire measure the same concept which researcher wants to measure (Sekaran, 2003). One of the ways to ensure validity is construct validity.

### *3.17.1 Construct Validity*

Construct validity is one of the very crucial methods (Salkind, 2000) to ensure validity assessment because it helps to produce good quality measurements (Schmitt and Klimoski, 1991). In this study, Confirmatory Factor Analysis (CFA) was used to assure construct validity. Reasons for selecting CFA are summarized in table 3-6. Results for CFA are shown in appendix D. CFA was done by using AMOS.

Table 3-6: Comparison between EFA and CFA

| **Difference Between Exploratory and Confirmatory Factor Analysis** | |
|---|---|
| **Exploratory Factor Analysis** | **Confirmatory Factor Analysis** |
| Heuristic-weak literature base | Strong theory and/or strong empirical base |
| Determine the number of factors | Number of factors fixed a priori |
| Determine whether the factors are correlated or uncorrelated | Factors fixed a priori as correlated or uncorrelated |
| Variables free to load on all factors | Variables fixed to load on a specific factor or factors |
| Source: Stevens, (1996) | |

### *3.17.2 Reliability Analysis*

Analysis of reliability was done through Cronbach Alpha test and the criterion to include or exclude the variables was set to be 0.70. Any variable having value of less than 0.70 was removed from further analysis. This cut-off value of 0.70 was set by Nunnally, (1978) and since then has been used in many research studies. Table 3-7 shows the Cornbach alpha value of variables and their item numbers used for further analysis. All the variables showed high reliability and convergent validity because a value of more than 0.7 implies convergent validity (Nunnally, 1978).

Table 3-7: Cronbach Alpha Value for every Dimension

| Dimension | Items | Cronbach Alpha |
|---|---|---|
| Work Schedule Autonomy | 3 | .886 |
| Decision Making Autonomy | 3 | .829 |
| Work Method Autonomy | 3 | .833 |
| Task Variety | 4 | .889 |
| Task Significance | 4 | .902 |
| Task Identity | 4 | .871 |
| Feedback from Job | 3 | .849 |
| Job Complexity | 3 | .834 |
| Information Processing | 4 | .905 |
| Problem Solving | 4 | .889 |
| Skill Variety | 4 | .881 |
| Specialization | 4 | .883 |
| Social Support | 6 | .865 |
| Initiated Interdependence | 3 | .851 |
| Received Interdependence | 3 | .858 |
| Feedback from Others | 3 | .842 |
| Physical Demands | 3 | .795 |
| Work Conditions | 5 | .923 |
| Software and Tools Used | 3 | .832 |
| Perceived Ease of Use | 5 | .931 |
| Perceived Usefulness | 10 | .875 |
| Extraversion | 3 | .914 |
| Agreeableness | 5 | .911 |
| Conscientiousness | 5 | .883 |
| Neuroticism | 3 | .751 |
| Openness to Experience | 10 | .892 |
| Explicit Knowledge Donation Behavior | 9 | .723 |
| Explicit Knowledge Collection Behavior | 9 | .865 |
| Implicit Knowledge Donation Behavior | 10 | .864 |
| Implicit Knowledge Collection Behavior | 10 | .905 |
| **Total Dimensions = 30** | **Total Items = 148** | **-** |

### *3.17.3 Removed Items*

Those items were removed whose Cronbach Alpha value was more than the overall Cronbach alpha value of variable. Table 3–8 shows the items and variables which were deleted. Interaction outside the organization and ergonomics were completely removed from further analysis. One of the reasons for their removal is low Cronbach Alpha value which can be because of their less significance for software developers. Since, in this case the respondents are software developers therefore they are less concerned about ergonomics and have less interaction outside the organization. Most of the times, project managers are talking to the clients and those who are outside the organization. Similarly, ergonomics is more about the appropriate position and body movement while performing a particular job which again is not a big problem for software developers because of the nature of job. Since, software development is a desk job therefore ergonomics factor might not be a big concern.

Table 3-8: Removed Variables and Items

| Name of Variable | Removed Items | Number of Items Removed |
|---|---|---|
| Job Complexity | ○ My job requires that I only do one task or activity at a time. | 1 |
| Ergonomics | ○ My job involves excessive reaching.<br>○ My work place allows for all size differences between people in terms of clearance, reach, eye height, leg room, etc.<br>○ The seating arrangements on my job are adequate (e.g., ample opportunities to sit, comfortable chairs, good postural support). | 3 |
| Interaction Outside Organization | ○ On the job, I frequently communicate with people who do not work for the same organization as I do.<br>○ My job requires spending a great deal of time with people outside my organization.<br>○ My job involves interaction with people who are not members of my organization.<br>○ My job involves a great deal of interaction with people outside my organization. | 4 |
| Perceived Ease of Use | ○ I find it easy to get the knowledge sharing technology to do what I want to do.<br>○ Learning to operate the knowledge sharing technology is easy for me.<br>○ It is easy for me to remember how to perform tasks using the knowledge sharing technology.<br>○ My interaction with knowledge sharing technology is clear and understandable.<br>○ Overall, I find the knowledge sharing technology easy to use. | 5 |
| Extraversion | ○ I am someone who is reserved.<br>○ I am someone who is sometimes shy, inhibited.<br>○ I am someone who is outgoing, sociable.<br>○ I am someone who tends to be quiet.<br>○ I am someone who has an assertive personality. | 5 |
| Agreeableness | ○ I am someone who is sometimes rude to others.<br>○ I am someone who tends to find fault with others.<br>○ I am someone who starts quarrels with others.<br>○ I am someone who can be cold and aloof. | 4 |
| Conscientiousness | ○ I am someone who is easily distracted.<br>○ I am someone who can be somewhat careless.<br>○ I am someone who tends to be disorganized.<br>○ I am someone who tends to be lazy. | 4 |
| Neuroticism | ○ I am someone who is depressed, blue.<br>○ I am someone who is relaxed, handles stress well.<br>○ I am someone who is emotionally stable, not easily upset.<br>○ I am someone who remains calm in tense situations.<br>○ I am someone who gets nervous easily. | 5 |

### 3.18 Multicollinearity

Multicollinearity is "*an interdependency condition that can exist quite apart from the nature, or even the existence, of dependence between X and y. It is both a facet and a symptom of poor designed experiment*" (Farrar and Glauber, 1964). Question is not about the existence or non-existence of multicollinearity in fact it is more about the severity of it. Variance Inflation Factor (VIF) and tolerance were used to detect multicollinearity. If the value of VIF>=10 and tolerance is less than 0.10 then there is definitely multicollineirty otherwise how many chances of multicollienaity exist depends on the value of VIF (from 0 to 10). This research used both VIF and tolerance methods to detect multicollienarity. Results are shown in appendix C and all the values of VIF are less than 10 and more than 0.10 level (for tolerance).

### 3.19 Scaling

Likert scaling method was used to measure the items in questionnaire. Likert scale technique was named after Dr. Rensis Likert who developed this technique. Likert scale is a psychometric response scale which is used to measure the preferences of the respondent or the level of agreement with the statement. Likert scale can be used either with even numbers like 1-4 or it can be used in odd numbers, for example, 1-5. Most commonly used scaling method is 1-5 although many researchers also use 7 point or 9 point Likert scale.

The reason why Likert scale method was used in this research is that Likert scale is simple, there are more chances of coming up with a highly reliable scale and it is easy for the respondents to understand.

Following 5 point Likert scaling method was adopted in this study:

<table>
<tr><td colspan="5">SA means that you strongly agree with the statement (value = 5)<br>A means that you agree with the statement (value = 4)<br>N means that you are undecided about the statement (value = 3)<br>DA means that you disagree with the statement (value = 2)<br>SD means that you strongly disagree with the statement (value = 1)</td></tr>
<tr><td>Strongly Disagree SD</td><td>Disagree DA</td><td>Neither Disagree nor Agree N</td><td>Agree A</td><td>Strongly Agree SA</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>

Figure 3-11: Scaling, Source: (Salkind, 2006)

### 3.20 Hierarchical Multiple Regression Analysis

Multiple regression analysis is one of the very powerful methods to test hypotheses or the relationships between experimental, quasi-experimental, and non-experimental data. Normally, multiple regressions is used when researcher wants to predict or understand a variable (known as dependent variable) through some other variables (known as predictors or independent variable(s)). Regression analysis can be done either simultaneously, stepwise and hierarchical regression (Petrocelli, 2003).

This research used hierarchical multiple regression analysis to test the framework. Reason being that there are two moderating variables and more than one predictors. Thus in order to analyze that which predictor has what kind of relationship with dependent variable when analyzed alone and when tested together with a moderator, hierarchical multiple regression analysis is more suitable. As was stated by Petrocelli, (2003), researchers are often interested to know the effect of various variables on dependent variable in sequential way so that the importance of each predictor can be found by analyzing that how much it contributes to the dependent variable. This can be achieved through hierarchical regression (Cohen, 2001, p. 523–524; Wampold and Freund, 1987, p. 377). Besides, Edwards (2008) also mentioned that hierarchical approach to test moderation is "*firmly rooted in literature*". Also, Cohen et al. (2003) and Pedhazur, (1997) reported that multiple regression is regularly used to test moderation.

After discussing the method which was used to test hypotheses (section 3.20), next section is about KSB questions. Part of questionnaire about KSB specific to software coders was developed by using Knowledge Area (KAs) and Knowledge Units (KUs) from SWEBOK, (1999) as mentioned in section 3.21.

### 3.21 Software Coding Specific Knowledge Sharing Behavior Questions

There are ten Knowledge Areas (KAs) in Software Engineering (SWEBOK, 2004). One of those KAs and a very important one is software construction. Software construction refers to "*coding, verification, unit testing, integration testing, and debugging*" (SWEBOK, 2004). This study focused on software coding only because testing and debugging can be done once a software is already coded. Software coding consists of three Knowledge Units (KUs) which are mentioned in table 3-9. Questions were asked from software developers about these KUs. Items were constructed with the help of information available (about the description of KUs) from SWEBOK, (1999) which is shown in table 3-10.

Table 3-9: Software Coding Knowledge Area

| The Software Coding Knowledge Area | |
|---|---|
| **KA Name** | Software Coding |
| **KA Description** | This area is concerned with knowledge about the construction of the software components that are identified and described in the design documents. This area includes knowledge about translation of a design into an implementation language, program coding styles, and the development and use of program documentation. |
| **KU** | Code Implémentation<br>Code Reuse<br>Coding Standards and Documentation |
| **References** | [Booch 87], [Deimel 90], [Dijkstra 76], [Humphrey 95], [Pfleeger 98], [Wilde 90] |

Source: (SWEBOK, 1999)

Table 3-10: Knowledge Units of Software Coding

| Description of the Software Coding Knowledge Units | |
|---|---|
| **KU Name** | Code Implementation |
| **KU Description** | This unit is concerned with knowledge about how to translate a software design into an implementation programming language. This unit includes knowledge about modular and incremental programming, structured programming, and knowledge of various programming paradigms (assembly, procedural, object-oriented, functional, and logic). It also includes knowledge about how to use source code development tools and programming language translation tools. |
| **KU Name** | Code Reuse |
| **KU Description** | This unit is concerned with knowledge about developing code by reuse of existing components and about developing reusable code. This unit also includes knowledge about reusable libraries, the inheritance mechanism, module referencing, and software portability issues and techniques. |
| **KU Name** | Coding Standards and Documentation |
| **KU Description** | This unit is concerned with knowledge about the use of standards for style and documentation in the construction of software. This unit includes knowledge about how to develop internal and external program documentation. |

Source: (SWEBOK, 1999)

### 3.22 Summary of Chapter

Chapter 3 was all about the methodology through which this research was conducted. This chapter discussed about research philosophy, research approach, research strategy, research choice, research technique and framework. Other sections which were part of this chapter includes hypotheses development based on research questions, factor development, sampling technique, choosing appropriate sample size and response rate. Data collection method, results of pilot study and reliability analysis were are also explained in this chapter.

# CHAPTER 4

# RESULTS – BIG FIVE PERSONALITY TRAITS AND KNOWLEDGE SHARING BEHAVIOR

## 4.0 Overview

This chapter describes the results about personality traits, hierarchical multiple regression analysis between Big Five Personality Traits (BFPTs) (independent variable), Explicit Knowledge Donation Behavior (EKDB), Explicit Knowledge Collection Behavior (EKCB), Implicit Knowledge Donation Behavior (IKDB), Implicit Knowledge Collection Behavior (IKCB) (dependent variables), Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) (moderating variables). Independent variable will remain unchanged throughout this chapter but dependent variables will keep on changing to see the impact of independent variable on all dependent variables. PEOU and PU are introduced at different stages to see their moderating role. Results from this chapter will answer research questions 1a, 1b and 3a. Results described in this chapter are reported in the following stages (hypotheses relevant to every stage are also mentioned):

Stage 1: Results about relationship between BFPTs, EKDB and PEOU
$H_{1a}$: Personality traits affect Explicit Knowledge Donation Behavior (EKDB) of SEs.
$H_{3a}$: PEOU moderates the relationship between personality traits and EKDB of SEs.

Stage 2: Results about relationship between BFPTs, EKCB and PEOU
$H_{1b}$: Personality traits affect Explicit Knowledge Collection Behavior (EKCB) of SEs.
$H_{3b}$: PEOU moderates the relationship between personality traits and EKCB of SEs.

Stage 3: Results about relationship between BFPTs, IKDB and PEOU
$H_{1c}$: Personality traits affect Implicit Knowledge Donation Behavior (IKDB) of SEs.
$H_{3c}$: PEOU moderates the relationship between personality traits and IKDB of SEs.

Stage 4: Results about relationship between BFPTs, IKCB and PEOU

$H_{1d}$: Personality traits affect Implicit Knowledge Collection Behavior (IKCB) of SEs.

$H_{3d}$: PEOU moderates the relationship between personality traits and IKCB of SEs.

Stage 5: Results about relationship between BFPTs, EKDB and PU

$H_{1a}$: Personality traits affect Explicit Knowledge Donation Behavior (EKDB) of SEs.

$H_{4a}$: PU moderates the relationship between personality traits and EKDB of SEs.

Stage 6: Results about relationship between BFPTs, EKCB and PU

$H_{1b}$: Personality traits affect Explicit Knowledge Collection Behavior (EKCB) of SEs.

$H_{4b}$: PU moderates the relationship between personality traits and EKCB of SEs.

Stage 7: Results about relationship between BFPTs, IKDB and PU

$H_{1c}$: Personality traits affect Implicit Knowledge Donation Behavior (IKDB) of SEs.

$H_{4c}$: PU moderates the relationship between personality traits and IKDB of SEs.

Stage 8: Results about relationship between BFPTs, IKCB and PU

$H_{1d}$: Personality traits affect Implicit Knowledge Collection Behavior (IKCB) of SEs.

$H_{4d}$: PU moderates the relationship between personality traits and IKCB of SEs.

Stage 9: Results about relationship between BFPTs, EKDB, PEOU and PU

$H_{1a}$: Personality traits affect Explicit Knowledge Donation Behavior (EKDB) of SEs.

$H_{5a}$: PEOU and PU moderates the relationship between personality traits and EKDB of SEs.

Stage 10: Results about relationship between BFPTs, EKCB, PEOU and PU

$H_{1b}$: Personality traits affect Explicit Knowledge Collection Behavior (EKCB) of SEs.

$H_{5b}$: PEOU and PU moderates the relationship between personality traits and EKCB of SEs.

Stage 11: Results about relationship between BFPTs, IKDB, PEOU and PU

$H_{1c}$: Personality traits affect Implicit Knowledge Donation Behavior (IKDB) of SEs.

$H_{5c}$: PEOU and PU moderates the relationship between personality traits and IKDB of SEs.

Stage 12: Results about relationship between BFPTs, IKCB, PEOU and PU

$H_{1d}$: Personality traits affect Implicit Knowledge Collection Behavior (IKCB) of SEs.

$H_{5d}$: PEOU and PU moderates the relationship between personality traits and IKCB of SEs.

**4.1 Personality Traits of Malaysian SEs**

Table 4-1 presents the mean score and standard deviation for Malaysian SEs. According to these results, highest personality trait for Malaysian SEs is extraversion (mean = 3.78, SD = 1.13), followed by conscientiousness (mean = 3.68, SD = 0.99), agreeableness (mean = 3.63, SD = 1.04), openness to experience (mean = 3.63, SD = 0.887) and neuroticism (mean = 2.68, SD = 0.99).

Table 4-1: Personality Traits of Malaysian SEs

| **Descriptive Statistics** | | | |
|---|---|---|---|
| **Factor Name** | **N** | **Mean** | **SD** |
| Extraversion | 384 | 3.78 | 1.13 |
| Conscientiousness | 384 | 3.68 | 0.99 |
| Agreeableness | 384 | 3.63 | 1.04 |
| Openness to Experience | 384 | 3.63 | 0.87 |
| Neuroticism | 384 | 2.68 | 0.99 |

**4.2 Relationship between BFPTs, EKDB and PEOU**

Figure 4-1 shows the variables used in the analysis between BFPTs, EKDB and PEOU. Big Five Personality Traits are used as independent variables in this analysis, EDB is dependent variable and PEOU is the moderating variable.

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 4-1: Components of Models 1-6 between BFPTs, PEOU and EKDB

Table 4-2 presents the models of hierarchical multiple regressions. Model 1 shows the significance of predicting variables on the dependent variables. Value of R = 0.877, R Square is 0.768 and Adjusted R Square is 0.765 which shows that 76.5% variance in the dependent variable can be predicted by the independent variables mentioned in model 1. P value is 0.000 which is less than .05, thus showing the fitness of model 1.

Table 4-2: Models between BFPTs, EKDB and PEOU

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .877[a] | 0.768 | 0.765 | 0.496 | 0.768 | 237.560 | 6 | 358 | 0.000 | 0.00 |
| 2 | .877[b] | 0.769 | 0.765 | 0.496 | 0.000 | 0.357 | 1 | 357 | 0.550 | 0.00 |
| 3 | .878[c] | 0.772 | 0.767 | 0.494 | 0.003 | 4.467 | 1 | 356 | 0.035 | 0.00 |
| 4 | .878[d] | 0.772 | 0.767 | 0.495 | 0.000 | 0.387 | 1 | 355 | 0.534 | 0.00 |
| 5 | .879[e] | 0.772 | 0.766 | 0.495 | 0.000 | 0.716 | 1 | 354 | 0.398 | 0.00 |
| 6 | .879[f] | 0.772 | 0.766 | 0.495 | 0.000 | 0.001 | 1 | 353 | 0.971 | 0.00 |

a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou

b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra

c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree

d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra, inter_peou_agree, inter_peou_consc

e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro

f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro, inter_peou_open

Table 4-2a (Appendix E) presents the impact of each individual predictor on dependent variable of model 1. The p value for four predictors is less than 0.05 therefore showing their significance whereas the p value for neuroticism is 0.53 which is higher than .05 thus shows that this variable has not a significant impact on EKDB. Although the p value for neuroticism is slightly higher than .05 level still it will be considered as not significant.

Model 2 in table 4-2 shows the impact of predicting variables on dependent variable with the moderating effect of PEOU on extraversion. There is no significant change in the fitness of model as R value is still 0.877, and R Square change is 0.000. P value is 0.000 <.05 thus showing the fitness of model. By looking at the moderating effect of PEOU on extraversion from table 4-2b (Appendix E), p value is 0.55>.05 thus suggesting that this moderating variable has no significant effect on the model whereas all other factors except neuroticism have a significant impact on EKDB as their p values are less than .05. P value for neuroticism is 0.63 > .05 therefore showing its insignificance for model 2.

Model 3 in table 4-2 is also significant as R = 0.878, adjusted R Square = 0.772 and p is less than .05. In this model, moderating impact of PEOU on extraversion and agreeableness was tested. There is 0.003 change in R Square value whereas the p value remains less than .05. This implies that there is an impact of PEOU as moderating variable on extraversion and agreeableness and the p values for these tow variables are also less than .05 thus showing their significance (table 4-2c: Appendix E). Table 4-2b (Appendix E) also shows that extraversion and neuroticism do not have significant impact on the model as their p values are higher than .05 whereas other 3 personality traits do have a significant impact because of their p values which are less than 0.05.

In model 4, besides 5 personality traits, moderating effect of PEOU on openness to experience, extraversion, agreeableness and conscientiousness was analyzed. As shown in table 4-2, model 4 is also significant at R = 0.878, R Square = 0.772, Adjusted R Square is 0.767 (predicting 76.7% variance because of moderating variables in model 4) and p value is 0.000. There is no change is R Square value which is 0.000. Table 4-2d (Appendix E) shows the individual effect of each variable on EKDB. Extraversion, conscientiousness, neuroticism and moderating effect of PEOU on conscientiousness all have no significant effect on EKDB as their p values are higher than .05 whereas agreeabless, openness to experience, inter_peou_extra, inter_peou_agree do have significant effects on EKDB.

Model 5 shows the relationship between five personality traits and moderating impact of PEOU on extraversion, agreeableness, conscientiousness and neuroticism. Value of R = 0.879, R Square = 0.772 and adjusted R Square is 0.766 showing 76.6 % variance in the dependent variable (Table 4-2). P value is 0.000<.05, showing the significance of model. There is no change is R Square value which remains at 0.000. Table 4-2e (Appendix E) shows the effect of each independent variable on EKDB. Extraversion, conscientiousness, neuroticism and inter_peou_consc are all not significant contributors as their p values are less than 0.05 whereas remaining variables namely agreeableness, Open_Exper, inter_peou_extra, inter_peou_agree and inter_peou_neuro have significant effects on EKDB when tested with other variables in this model. P values for these variables are less than .05 as shown in table

4-2d (Appendix E).

In model 6, moderating effect of PEOU on all big five personality factors was analyzed. Value of R is 0.878, R Square = 0.772 and adjusted R square is 0.766 suggesting 76.6% variance in EKDB due to the independent variables of this model. P value is 0.000<.05 thus showing the significance of model. Table 4-2f (Appendix E) shows the effect of each individual variable on EKDB. Extraversion (p=0.60>.05), conscientiousness (p=0.72>.05), neuroticism (p=0.56>.05), inter_peou_consc (p=0.56>.05) and inter_peou_open (p=0.97>.05) are all not significant based on their p values when tested together with other variables. Agreeableness (p=0.00<.05), Open_Exper (p=0.17<.05), inter_peou_extra (p=0.20<.05), inter_peou_agree (p=0.13<.05) and inter_peou_neuro (p=0.41<-05) are all significant variables.

### 4.3 Relationship between BFPTs, EKCB and PEOU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 4-2: Components of Models 1-6 between BFPTs, PEOU and EKCB

Table 4-3 shows the result of big five personality traits as independent variables, explicit knowledge collection behavior as dependent variable and PEOU as moderating variable. In model 1, only five personality traits and PEOU were analyzed. Value of R = 0.874, R Square = 0.764 and adjusted R Square = 0.761 showing 76.1% variance in EKCB can be predicted by this model. Significance of this model can also be verified from p value which is 0.00<.05.

Table 4-3: Models between BFPTs EKCB and PEOU

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .874[a] | 0.764 | 0.761 | 0.5021 | 0.764 | 231.802 | 6 | 358 | 0.000 | 0.00[a] |
| 2 | .874[b] | 0.764 | 0.760 | 0.50243 | 0.000 | 0.523 | 1 | 357 | 0.470 | 0.00[b] |
| 3 | .875[c] | 0.766 | 0.761 | 0.50165 | 0.001 | 2.116 | 1 | 356 | 0.147 | 0.00[c] |
| 4 | .875[d] | 0.766 | 0.761 | 0.50175 | 0.001 | 0.858 | 1 | 355 | 0.355 | 0.00[d] |
| 5 | .875[e] | 0.766 | 0.760 | 0.50237 | 0.000 | 0.130 | 1 | 354 | 0.719 | 0.00[e] |
| 6 | .876[f] | 0.767 | 0.760 | 0.5029 | 0.000 | 0.250 | 1 | 353 | 0.617 | 0.00[f] |
| a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou | | | | | | | | | | |
| b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra | | | | | | | | | | |
| c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree | | | | | | | | | | |
| d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree, inter_peou_consc | | | | | | | | | | |
| e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro | | | | | | | | | | |
| f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro, inter_peou_open | | | | | | | | | | |

For model 1, effect of each independent variable when analyzed together is shown in table 4-3a (Appendix E). The p values for all variables are as follows: Extraversion ($p=0.00<.05$), Agreeableness ($p=0.00<.05$), Conscientiousness ($p=0.00<.05$), Neuroticism ($p=0.25<.05$) and Open_Exper ($p=0.00<.05$). P values of all the variables are less than .05 therefore showing that all of them are significant.

In model 2, besides five big five personality traits, moderating effect of PEOU on extraversion was also analyzed. Model 2 still remains significant at R = 0.874, R Square = 0.764, adjusted R Square = 0.760 and $p = 0.00<.05$. Change in R Square is also 0.000. Table 4-3b (Appendix E) shows the effect of each individual variable on EKCB. P value of variables are extraversion ($p=0.000$), agreeableness ($p=0.000$), conscientiousness ($p=0.008$), neuroticism (0.335), Open_Exper (0.001) and Inter_peou_extra (0.470).

In model 3, moderating effect of PEOU on extraversion and agreeableness is shown along big fiver personality traits. Value of R = 0.875, R Square = 0.766 and adjusted R Square is 0.761. This means that 76.1% variance in EKCB can be predicted by this model. P value for model 3 is .000<.05 thus showing the significance of this model. P values for each variable when tested together are 0.427, 0.000, 0.007, 0.437, 0.001, 0.191 and 0.147 for extraversion, agreeableness, neuroticism, Open_Exper, inter_peou_extra and inter_peou_agree respectively (table 4-3c: Appendix E).

Model 4 is about the regression analysis of five personality traits as independent variable, moderating effect of POU on openness to experience, extraversion, agreeableness and conscientiousness with EKCB as dependent variable. R value for this model is 0.875 which is quite high, R Square is 0.766 and adjusted R square is 0.761 as shown in table 4-3. This shows that variance in EKCB can be predicted up to 76.1% by this model. P value for the model is .000<.05 which shows it is a significant model. Table 4-3d (Appendix E) shows the effect of each individual variable when tested collectively. Based on the p values, extraversion, conscientiousness, neuroticism, inter_peou_extra and inter_peou_consc are not significant in this model because there p values are higher than 0.05. Other variables which includes agreeableness and Open_Exper are significant contributors in this model.

Model 5 is about the analysis of big five personality traits, PEOU and EKCB. Value of R = 0.875, R square is 0.766 and adjusted R square is 0.760 which shows that 76.0% variance in EKCB can be predicted by this model as shown in table 4-3. P value which is 0.000 also shows the significance of model. Table 4-3e (Appendix E) presents the effect of every variable on EKCB individually. Extraverion (p = 0.278>.05), conscientiousness (p = 0.831>.05), neuroticism (p = 0.907>.05), inter_peou_extra (p = 0.429>.05), inter_peou_agree (p = 0.124>.05), inter_peou_consc (p = 0.359>.05) and inter_peou_neuro (p = 0.719>.05). P values of all these variables are higher than .05 thus their individual contribution is not significant. The only variables who have significant contributions in this model are agreeableness (p = 0.002<.05) and Open_Exper (p = 0.001<.05).

Table 4-3 shows model 6 which analyzes moderating effect of PEOU on all big five personality traits, EKCB and big five personality traits. Value of R = 0.876, R square = 0.767 and adjusted R square = 0.760. This shows that variance in EKCB can be 76.0% predicted by this model which is a sign of a good model and it is also significant because p value for this model is 0.00 which is less than 0.05. Individual effects of each variable on EKCB are shown in table 4-3f (Appendix E). Extraversion, conscientiousness, neuroticism, Open_Exper, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro and inter_peou_open are all not significant individually as their p values are greater than .05 but when tested together they form a significant model. The only variable which is significant is agreeableness as $p = 0.008 < .05$.

### 4.4 Relationship between BFPTs, IKDB and PEOU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 4-3: Components of Models 1-6 between BFPTs, PEOU and IKDB

Table 4-4 represents the various regression models between big five personality traits, IKDB and PEOU. Model 1 which is about the effect of big five personality traits, PEOU and IKDB has value of $R = 0.866$, $R$ square $= 0.750$ and adjusted $R$ square $= 0.747$. This means that 74.7% variance in IKDB can be predicted by this model which shows that model is good and p value is also 0.000 which is less than .05 thus showing significance of this model.

Table 4-4: Models between BFPTs, EKDB and PEOU

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .866[a] | 0.750 | 0.747 | 0.523 | 0.750 | 215.330 | 6 | 358.000 | 0.000 | 0.000 |
| 2 | .867[b] | 0.752 | 0.748 | 0.522 | 0.002 | 2.580 | 1 | 357 | 0.109 | 0.000 |
| 3 | .869[c] | 0.754 | 0.750 | 0.520 | 0.002 | 3.135 | 1 | 356 | 0.077 | 0.000 |
| 4 | .869[d] | 0.756 | 0.750 | 0.519 | 0.001 | 1.937 | 1 | 355 | 0.165 | 0.000 |
| 5 | .869[e] | 0.756 | 0.750 | 0.520 | 0.000 | 0.046 | 1 | 354 | 0.830 | 0.000 |
| 6 | .869[f] | 0.756 | 0.749 | 0.521 | 0.000 | 0.120 | 1 | 353 | 0.729 | 0.000 |

a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousnes, peou

b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra

c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra, inter_peou_agree

d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra, inter_peou_agree, inter_peou_consc

e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro

f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro, inter_peou_open

Table 4-4a (Appendix E) shows the effect of each variable separately on model 1. All the variables are contributing significantly except neuroticism as its p value is 0.312 which is higher than 0.05. P values of extraversion, agreeableness, conscientiousness and Open_Exper are 0.000, 0.000, 0.013 and 0.010 respectively.

Table 4-4 represents model 2 which shows the regression analysis between big five personality traits, PEOU as moderating variable and IKDB. Value of R for this model is 0.867, R square = 0.752 and adjusted R square is 0.748 suggesting 74.8% variance in IKDB because of this model. P value is 0.000 which is less than 0.05 thus making this model significant. Effect of each variable individually is shown in table 4-4b (Appendix E). Extraversion ($p = 0.000<.05$), agreeableness ($p = 0.000<.05$), conscientiousness ($p = 0.038<.05$) and Open_Exper ($p = 0.003<.05$) are significant contributors in the model except neuroticism ($p = 0.523>.05$) and inter_peou_extra ($p = 0.109>-05$).

Model 3 has R value equal to 0.869, R square is 0.754 and adjusted R square is 0.750. This model can predict 75.0% variance in IKDB which shows that model is good. P value also shows the significance of this model as $p=0.000<.05$ (table 4-4). Effect of each variable individually is shown in table 4-4c (Appendix E). Extraversion ($p = 0.408$), neuroticism ($p = 0.677$), inter_peou_extra ($p = 0.143$) and inter_peou_agree ($p = 0.077$) are not significant variables because of their p values which are higher than .05. Significant variables are agreeableness ($p = 0.000$), conscientiousness ($p = 0.032$), Open_Extra ($p = 0.002$). P values for these variables are less than .05.

Model 4 in table 4-4 shows the regression results of PEOU as moderating variable, IKDB as dependent variable and big five personality traits as predictors. Regression values show that this model is statistically good and significant. Value of R = 0.869, R square = 0.756 and adjusted R square = 0.750. Adjusted R square shows that 75.0% variance in the dependent variable can be predicted by this model and p value is 0.000 which is less than 0.05 thus suggesting significance of the model. Effect of each variable is shown in table 4-4d (Appendix E). Extraversion, conscientiousness, neuroticism, inter_peou_extra, inter_peou_consc are all not significant contributors when analyzed together with all other variables. Significant variables include agreeableness, Open_Exper and inter_peou_agree. P values for non-significant variables are higher than 0.05 and less than 0.05 for significant variables as shown in table 4-4d (Appendix E).

Model 5 in table 4-4 shows the results of regression for big five personality traits, PEOU as moderating variable and IKDB as dependent variable. Value of R = 0.869, R square = 0.756 and adjusted R square = 0.750. This shows that 75.0% variance in IKDB can be predicted by this model. Significance level is also good as it is 0.000 less than .05. Table 4-3e shows the results of effect of each variable on IKDB when tested together. Extraversion, conscientiousness, neuroticism, inter_peou_extra, inter_peou_consc, inter_peou_neuro are not significant contributors because their significance values are higher than .05. Significant variables are agreeableness, Open_Exper and inter_peou_agree.

Model 6 in table 4-4 show the regression results of independent variables which are big five personality traits, moderating variable (PEOU) and IKDB (dependent variable). Value of R = 0.869, R square = 0.756 and adjusted R square = 0.749. Variance in IKDB can be predicted by this model up to 74.9%. P value is 0.000<.05, which is significant. Individual effect of each variable is shown in table 4-4f (Appendix E). Non-significant variables include extraversion (p = 0.198>.05), conscientiousness (p = 0.739>.05), neuroticism (p = 0.960>.05), Open_Exper (p = 0.300>.05), inter_peou_extra (p = 0.633>.05), inter_peou_consc (p = 0.208>.05), inter_peou_neuro (p = 0.775>.05) and inter_peou_open (p = 0.729>.05). Only significant variables are agreeableness (p = 0.001<.05) and inter_peou_agree (p = 0.040<.05).

### 4.5 Relationship between BFPTs, IKCB and PEOU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 4-4: Components of Models 1-6 between BFPTs, PEOU and IKCB

Table 4-5 shows various models of regression between big five personality traits as independent variables, PEOU as moderating variable and IKCB as dependent variable. Model 1 predicts IKCB through six predictors (big five personality traits and peou). value of R = 0.876, R square = 0.768 and adjusted R square = 0.765. Variance in IKCB by this model can be predicted up to 76.5%. P value is 0.000 which is less than 0.05 thus showing the significance of the model.

Table 4-5: Models between BFPTs, IKCB and PEOU

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .876[a] | 0.768 | 0.765 | 0.498 | 0.768 | 237.246 | 6 | 358 | 0.000 | 0.000 |
| 2 | .877[b] | 0.769 | 0.766 | 0.497 | 0.001 | 1.938 | 1 | 357 | 0.165 | 0.000 |
| 3 | .878[c] | 0.771 | 0.767 | 0.496 | 0.002 | 2.569 | 1 | 356 | 0.110 | 0.000 |
| 4 | .878[d] | 0.771 | 0.766 | 0.497 | 0.000 | 0.029 | 1 | 355 | 0.864 | 0.000 |
| 5 | .878[e] | 0.771 | 0.765 | 0.497 | 0.000 | 0.002 | 1 | 354 | 0.966 | 0.000 |
| 6 | .878[f] | 0.771 | 0.765 | 0.498 | 0.000 | 0.214 | 1 | 353 | 0.644 | 0.000 |

a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou

b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra

c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra, inter_peou_agree

d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou , inter_peou_extra, inter_peou_agree, inter_peou_consc

e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro

f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro, inter_peou_open

Table 4-5a (Appendix E) shows the effect of each variable separately on model 1. All the variables are significant as their p values are less than 0.05 except neuroticism whose p value = 0.257>.05. P values for extraversion agreeableness, conscientiousness and Open_Exper are 0.000, 0.000, 0.001 and 0.06 respectively.

Model 2 in table 4-5 shows the regression results for independent variables which are big five personality traits, PEOU as moderating and IKCB as dependent variable. Regression values for this model are as follows: R = 0.877, R square = 0.769 and adjusted R square = 0.766. This value of adjusted R square shows that 76.6% variance in the dependent variable can be predicted by this model. Model 2 is also significant as p value is 0.000 which is less than 0.05. Table 4-5b (Appendix E) shows the effect of each variable individually when tested together for model 2. Significant variables are extraversion (p = 0.000), agreeableness (p = 0.000), conscientiousness (0.005) and Open_Exper (0.029). These variables are significant contributors in this model because their p values are less than 0.05. Non-significant variables whose p values are greater than .05 are neuroticism (p = 0.421) and inter_peou_extra (p = 0.165).

Model 3 in table 4-5 shows regression results for big five personality traits, PEOU as moderator for extraversion and agreeableness and IKCB as dependent variable. R value for this model is 0.878, R square is 0.771 and adjusted R square is 0.767, meaning that 76.7% variance in IKCB can be predicted by the variables mentioned in this model. P value is 0.000<.05 thus showing the significance of the model. Table 4-5c (Appendix E) represents the effect of each variable individually including the moderating effect of PEOU on extraversion and agreeableness. Significant variables are agreeableness, conscientiousness and Open_Exper because their p values are less than 0.05. Insignificant variables are extraversion, neuroticism, inter_peou_extra and inter_peou_agree as their p values are higher than 0.05.

Regression values for model 4 are shown in table 4-5. This model is about regression analysis between IKCB, big five personality traits and impact of PEOU on extraversion, agreeableness and conscientiousness. Value of R for this model is 0.878, R square = 0.771 and adjusted R square = 0.766. This means that 76.6% variance in IKCB can be predicted by the model. P value which is 0.000<.05 also shows the significance of the model. Individual effects of each variable in this model are shown in table 4-5d (Appendix E). Extraversion, conscientiousness, neuroticism, inter_peou_extra, inter_peou_agree and inter_peou_consc are not significant variables based on their p values. Significant variables are agreeableness and Open_Exper.

Model 5 in table 4-5 is about regression between IKCB, big five personality traits and moderating effect of PEOU on extraversion, agreeableness, conscientiousness and neuroticism. R value = 0.878, R square = 0.771 and adjusted R square = 0.765. This shows that 76.5% variance in IKCB can be predicted by this model which is a sign of a statistically good model. This model is significant as well as p value = 0.000 which is less than 0.05. Table 4-5e (Appendix E) shows the effects of each variable on IKCB in this model. Extraversion (p = 0.273), conscientiousness (p = 0.198), neuroticism (p = 0.710), inter_peou_extra (p = 0.198), inter_peou_agree (p = 0.316), inter_peou_consc (p = 0.865) and inter_peou_neuro (p = 0.966) are the not significant variables because their p values are higher than 0.05. Significant variables are agreeableness (p = 0.007<.05) and Open_Exper (p = 0.021<.05).

Model 6 in table 4-5 is about the regression between big five personality traits, IKCB and moderating effect of PEOU on all big five personality traits. Regression values include R = 0.878, R square = 0.771 and adjusted R square = 0.765. Adjusted R square shows that 76.5% variance in IKCB can be predicted by this model. Model 6 is also significant as its p value is 0.000 which is less than 0.05. Individual effect of each variable when tested together is shown in table 4-5f (Appendix E). P value for agreeableness is 0.022 which is less than .05 thus making it the only significant contributor to this model. P values of agreeableness, conscientiousness, neuroticism, Open_Exper, inter_peou_extra, inter_peou_agree, inter_peou_consc, inter_peou_neuro and inter_peou_open are 0.449, 0.258, 0.641, 0.163, 0.179, 0.478, 0.956, 0.886 and 0.644 respectively which are all statistically not significant as p>.05.

### 4.6 Relationship between BFPTs, EKDB and PU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 4-5: Components of Models 1-6 between BFPTs, PU and EKDB

Table 4-6 shows the variables analyzed in models 1-6. Model 1 shows the results of regression between big five personality traits, EKDB and PU. Value of R for this model is 0.877, R square = 0.768 and adjusted R square = 0.765. This shows that 76.5% variance in EKDB can be predicted by model 1. P value = 0.000 which is less than 0.05 thus showing the significance of the model.

Table 4-6: Models between BFPTs, EKDB and PU

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .877[a] | 0.768 | 0.765 | 0.496 | 0.768 | 237.56 | 6 | 358 | 0.000 | 0.000 |
| 2 | .899[b] | 0.809 | 0.805 | 0.452 | 0.04 | 74.898 | 1 | 357 | 0.000 | 0.000 |
| 3 | .901[c] | 0.811 | 0.807 | 0.449 | 0.002 | 4.663 | 1 | 356 | 0.031 | 0.000 |
| 4 | .901[d] | 0.811 | 0.807 | 0.450 | 0.000 | 0.082 | 1 | 355 | 0.775 | 0.000 |
| 5 | .911[e] | 0.830 | 0.826 | 0.427 | 0.019 | 39.842 | 1 | 354 | 0.000 | 0.000 |
| 6 | .911[f] | 0.830 | 0.825 | 0.428 | 0.000 | 0.032 | 1 | 353 | 0.859 | 0.000 |

a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu

b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu , inter_pu_extra

c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu , inter_pu_extra, inter_pu_agree

d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu , inter_pu_extra, inter_pu_agree, inter_pu_consc

e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu , inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro

f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro, inter_pu_open

Table 4-6a (Appendix E) shows the results of effects of each variable on EKDB in model 1 when tested together. All variables are significant contributors except neuroticism. Significance of these variables depends on the p value which should be less than .05. In this case, p values of extraversion, agreeableness, conscientiousness and Open_Exper are less than 0.05. Whereas the p value for neuroticism is 0.532 which is higher than .05 thus it is not a significant variable.

Results of model 2 are shown in table 4-6. This model represents the regression between big five personality traits, EKDB and moderating effect of PU on extraversion. R value = 0.899, R square = 0.809 and adjusted R square = 0.805. Variance equivalent to 80.5% in EKDB can be predicted by this model. P value shows that model 2 is significant as its p value = 0.000 which is less than 0.05. Table 4-6b (Appendix E) shows the individual effect of each variable in this model. P values for extraversion, agreeableness and inter_pu_extraversion are 0.001, 0.035 and 0.000 respectively. These three variables are significant because their p values are less than 0.05. On the other hand, conscientiousness, neuroticism and Open_Exper have p values 0.077, 0.821 and 0.167 respectively. These three variables are not significant as their p values are higher than 0.05 level.

Model 3 in table 4-6 is about regression analysis between big five personality traits, EKDB and moderating effect of PU on extraversion and agreeableness. For this model, regression value R is 0.901. R square = 0.811 and adjusted R square = 0.807 meaning 80.7% variance in EKDB can be predicted by this model which shows that model is a good fit. P value is also less than 0.05 therefore model 3 is significant as well. Individual effect of each variable on model is shown in table 4-6c (Appendix E). Extraversion ($p = 0.948$), agreeableness ($p = 0.221$), conscientiousness ($p = 0.257$), neuroticism ($p = 0.844$), Open_Exper ($p = 0.212$) and inter_pu_extra ($p = 0.078$) are all not significant contributors based on their p values which are higher than 0.05. The only significant variable is inter_pu_agree ($p = 0.031$) as its p value is less than .05.

Table 4-6 shows the regression results of model 5 which is about big five personality traits, EKDB and moderating effect of PU on extraversion, agreeableness and conscientiousness. R value = 0.901, R square = 0.811 and adjusted R square = 0.807. Adjusted R square shows that 80.7% variance in EKDB can be predicted by this model. P value is 0.000<.05 thus showing the significance of the model. Individual effect of each variable in this model is shown in table 4-6d (Appendix E). Extraversion ($p = 0.852$), agreeableness ($p = 0.413$), conscientiousness ($p = 0.950$), neuroticism ($p = 0.849$), Open_Exper ($p = 0.207$), inter_pu_extra ($p = 0.146$), inter_pu_agree ($p = 0.138$) and inter_pu_consc ($p = 0.775$) are all not significant contributors if tested together in this model. P values of all these variables are greater than .05.

Table 4-6 shows the moderating effect of PU on extraversion, agreeableness, conscientiousness and neuroticism along the effects of big five personality traits on EKDB. Regression values R = 0.911, R square = 0.830 and adjusted R square = 0.826. This shows that 82.6% variance in EKDB can be predicted by this model (model 5). P value = 0.000 which is less than 0.05 thus showing the significance of the model. Table 4-6e (Appendix E) shows the results of effect of each variable on model 5. Only significant contributors for this model are neuroticism ($p = 0.000<.05$) and inter_pu_neuro (p = 0.000<.05). All other variables are not significant as their p values are greater than .05.

Model 6 in table 4-6 shows the results of regression between big five personality traits, EKDB and moderating effect of PU on all big five personality traits. Value of R for this is 0.911, R square = 0.830 and adjusted R square = 0.825. This shows that 82.5% variance in EKDB can be predicted by this model which is a good sign of model fitness. P value = 0.000 which is less than 0.05 thus model is significant as well. Individual effect of each variable as independent and moderator is shown in table 4-6f (Appendix E). Only variables which are contributing significantly for model 6 are neuroticism (p = 0.000<.05) and inter_pu_neuro (p = 0.000<.05) as their p values are less than 0.05. All other variables are statistically not significant based on their p values.

### 4.7 Relationship between BFPTs, EKCB and PU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 4-6: Components of Models 1-6 between BFPTs, PU and EKCB

In table 4-7, model 1 is between big five personality traits, pu and EKCB. Model is a good fit as adjusted R square is equivalent to 0.761. This shows that 76.1% variance in EKCB can be predicted by model 1. Value of R = 0.874 and R square = 0.764. P value is 0.000 which is less than 0.05 thus model 1 is significant as well.

Table 4-7: Models between BFPTs, EKCB and PU

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .874[a] | 0.764 | 0.761 | 0.502 | 0.764 | 231.802 | 6 | 358 | 0.000 | 0.000 |
| 2 | .892[b] | 0.796 | 0.793 | 0.467 | 0.032 | 56.613 | 1 | 357 | 0.000 | 0.000 |
| 3 | .895[c] | 0.801 | 0.797 | 0.463 | 0.004 | 7.600 | 1 | 356 | 0.006 | 0.000 |
| 4 | .895[d] | 0.801 | 0.796 | 0.463 | 0.000 | 0.350 | 1 | 355 | 0.555 | 0.000 |
| 5 | .903[e] | 0.815 | 0.810 | 0.447 | 0.014 | 27.309 | 1 | 354 | 0.000 | 0.000 |
| 6 | .903[f] | 0.815 | 0.810 | 0.448 | 0.000 | 0.007 | 1 | 353 | 0.933 | 0.000 |
| a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu | | | | | | | | | | |
| b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra | | | | | | | | | | |
| c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree | | | | | | | | | | |
| d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu , inter_pu_extra, inter_pu_agree, inter_pu_consc | | | | | | | | | | |
| e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu , inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro | | | | | | | | | | |
| f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro, inter_pu_open | | | | | | | | | | |

Table 4-7a (Appendix E) shows the effects of each variable on model 1. All the variables in model 1 are significant based on their p values which are less than 0.05 except neuroticism. P value of neuroticism = 0.250>.05 thus it is not a significant contributor when tested together with other variables of the model.

Regression values of Model 2 are shown in table 4-7. value of R = 0.892, R square = 0.796 and adjusted R square = 0.793. This shows that 79.3% variance in EKCB is predicted by the independent variables in model 2. P value of the model is also significant (p = 0.000). Individual effect of each variable is shown in table 4-7b (Appendix E). Significant variables are extraversion (p = 0.008<.05), conscientiousness (p = 0.024<.05) and inter_pu_extra (p = 0.000<.05). Non-significant variables are agreeableness (p = 0.061>.05), neuroticism (p = 0.660>.05) and Open_Exper (p = 0.091>.05).

Table 4-7c (Appendix E) shows the results of model in which PU is affecting extraversion and agreeableness as moderator variables. Dependent variable in this model is EKCB and big five personality traits are predictors. Model 3 has R value = 0.895, R square = 0.801 and adjusted R square = 0.797. Adjusted R square shows that 79.7% variance in EKCB can be predicted by these variables which is a good fit. P values also proves that model is a significant one as its p value = 0.000<.05. Contribution of each variable individually for this model is shown in table 4-7c (Appendix E). This table shows that extraversion, agreeableness, conscientiousness, neuroticism, Open_Exper and inter_pu_extra are all not significant contributors because their p values are higher than 0.05. The only significant contributor to the model when tested together with other variables is inter_pu_agree (p value = 0.006<.05).

Values for model 4 are shown in table 4-7. In this model, big five personality traits and pu are acting as predictors, EKCB as dependent variable and PU is moderating extraversion, agreeableness and conscientiousness. Value of R for model 4 is 0.895, R square = 0.801 and adjusted R square = 0.796. This results in the 79.6% variance in EKCB by this model. P value also suggests that it is a statistically significant model as p value = 0.000<.05. Individual contribution of each variable to the model is shown in table 4-7d (Appendix E). All the variables are not significant when tested together as their p values are greater than 0.05.

Table 4-7e (Appendix E) is about the moderating effect of PU on extraversion, agreeableness, conscientiousness and neuroticism. Table 4-7 shows that R = 0.903, R square = 0.815 and adjusted R square = 0.810 for model 5. Variance of 81.5% in EKCB can be predicted by this model. P value = 0.000 which is less than 0.05 thus model 5 is statistically significant. Table 4-7e (Appendix E) shows the effect of each variable on EKCB in model 5. Only two variables neuroticism (p = 0.000<.05) and inter_pu_neuro (p = 0.000<.05) are significant contributors. All other variables are not significant when tested together.

Table 4-7f (Appendix E) is about the moderating effect of PU on big five personality traits on EKCB. Table 4-7 shows the regression results. Value of R = 0.903, R square = 0.815 and adjusted R square = 0.810. This shows that 81.0% variance in EKCB can be predicted by this model which shows the good fitness of model 6. Effect of each variable individually is shown in table 4-7f (Appendix E). Neuroticism and inter_pu_neuro are the only significant contributors because their p values are less than 0.05. All other variables are not significant contributors when tested together with other variables based on their p values which are greater than 0.05.

### 4.8 Relationship between BFPTs, IKDB and PU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 4-7: Components of Models 1-6 between BFPTs, PU and IKDB

Figure 4-7 shows the components of model 1-6 which comprises of big five personality traits, PU as moderator and IKDB as an independent variable. Table 4-8 shows the regression results for model 1 which is between big five personality traits, PU and IKDB. Value of R = 0.866, R square = 0.750 and adjusted R square = 0.747. These values suggest that 74.7% variance in dependent variable which is IKDB in this case can be predicted by variables in model 1. P value for this model is 0.000 which is less than 0.05 thus it is a statistically significant model.

Table 4-8: Models between BFPTs, IKDB and PU

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .866[a] | 0.750 | 0.747 | 0.523 | 0.750 | 215.33 | 6 | 358 | 0.000 | 0.000 |
| 2 | .889[b] | 0.791 | 0.787 | 0.480 | 0.040 | 68.236 | 1 | 357 | 0.000 | 0.000 |
| 3 | .891[c] | 0.793 | 0.789 | 0.477 | 0.003 | 4.441 | 1 | 356 | 0.036 | 0.000 |
| 4 | .891[d] | 0.794 | 0.789 | 0.477 | 0.001 | 1.225 | 1 | 355 | 0.269 | 0.000 |
| 5 | .899[e] | 0.808 | 0.803 | 0.462 | 0.014 | 25.346 | 1 | 354 | 0.000 | 0.000 |
| 6 | .899[f] | 0.808 | 0.803 | 0.461 | 0.001 | 1.477 | 1 | 353 | 0.225 | 0.000 |
| a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu | | | | | | | | | | |
| b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra | | | | | | | | | | |
| c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree | | | | | | | | | | |
| d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc | | | | | | | | | | |
| e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro | | | | | | | | | | |
| f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro, inter_pu_open | | | | | | | | | | |

Model 1 comprises of big fiver personality traits, PU as independent variables and IKDB as dependent variable. Table 4-8a (Appendix E) shows the effects of each variable on IKDB when tested together. P values for extraversion, agreeableness, conscientiousness and Open_Exper are 0.000, 0.000, 0.013 and 0.010 respectively. All these variables are significant based on their p values which are less than 0.05. Neuroticism is the only variable in this model which is not significant having value of 0.312>.05.

Table 4-8b (Appendix E) shows the regression model comprising of big five personality traits, moderating effect of PU on extraversion and IKDB as dependent variable. Value of R for this regression model is 0.889, R square = 0.791 and adjusted R square = 0.787. This means that 78.7% variance in IKDB can be predicted by predictors in model 2. P value of the model is 0.000<.05 thus showing the significance of the model. Table 4-8b (Appendix E) shows the results of effect of each variable on IKDB. Variables having significant contribution to the model are extraversion (p = 0.004<.05) and inter_pu_extra (p = 0.000<.05). Non-significant variables are agreeableness (p = 0.064>.05), conscientiousness (p = 0.075>.05), neuroticism (p = 0.819>.05) and Open_Exper (p = 0.349>.05).

Table 4-8c (Appendix E) is about the regression model between big five personality traits, moderating effect of PU on extraversion and agreeableness. Table 4-8 shows the results for regression test for this model. R value = 0.891, R square = 0.973 and adjusted R square = 0.789. This shows that 78.9% variance in IKDB can be predicted by this model which shows the good fitness of the model. Significance of this model can be judged from its p value which is .000<.05. Table 4-8c (Appendix E) shows the effect of each variable in the model on IKDB. The only variable which has a significant contribution to the model is inter_pu_agree having p value of 0.036<.05. All other variables have no significant p values (greater than 0.05).

Table 4-8d (Appendix E) is about the regression model between big five personality traits, moderating effect of PU on extraversion, agreeableness and conscientiousness and dependent variable (IKDB). Table 4-8 shows the results for regression analysis. Value of R for this model is 0.891, R square = 0.794 and adjusted R square = 0.789. Value of adjusted R square shows that 78.9% variance in IKDB can be presented by these predictors (in model 4). P value (0.000<.05) also suggests that this model (model 4) is a significant model. Table 4-8d (Appendix E) shows the results of each variable on IKDB in model 4. All of the variables have no significant contribution to the model when tested together based on their p values.

Table 4-8e (Appendix E) comprises of the big five personality traits, PU as moderator and IKDB as dependent variable. Table 4-8 shows the results of regression analysis for model 5. Based on the regression analysis, it can be analyzed that model 5 is a statistically good fit model. As value of R = 0.899, R square = 0.808 and adjusted R square = 0.803. This model is a good fit because 80.3% variance in IKDB can be predicted by predictors in this model. Model 5 is significant as well because p = 0.000<.05. Table 4-8e (Appendix E) shows the effect of each variable in model 5 on IKDB. Significant variables are neuroticism (p = 0.000<.05) and inter_pu_neuro (p = 0.000<.05). Non-significant variables are extraversion (p = 0.734>.05), agreeableness (p = 0.595>.05), conscientiousness (p = 0.375>.05), Open_Exper (p = 0.384>.05), inter_pu_extra (p = 0.231>.05), inter_pu_agree (p = 0.959>.05) and inter_pu_consc (p = 0.261>.05).

Table 4-8f (Appendix E) represents model 6 which is about big five personality traits, moderating effect of PU on all big five personality traits and IKDB as dependent variable. Regression results for model 6 are shown in table 4-8. These results show that value of R = 0.899, R square = 0.808 and adjusted R square = 0.803. This means that 80.3% variance in dependent variable (IKDB) can be predicted by variables in model 6. Significance value of model is .000 which is less than 0.05, showing that model is statistically significant. Table 4-8f (Appendix E) shows the effect of each variable on IKDB in model 6. Based on p values, neuroticism with p value of 0.000 and inter_pu_neuro with p value of 0.000 are the only significant contributors as their p values are less than 0.05. P value for extraversion, agreeableness, conscientiousness, Open_Exper, inter_pu_extra, inter_pu_agree, inter_pu_consc and inter_pu_open are 0.799, 0.966, 0.187, 0.159, 0.105, 0.700, 0.128 and 0.225 respectively. All these values are greater than 0.05 therefore considered as not significant contributors to the model when tested together with other variables.

## 4.9 Relationship between BFPTs, IKCB and PU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 4-8: Components of Models 1-6 between BFPTs, PU and IKCB

Figure 4-8 shows the components of models 1-6 with big five personality traits as independent variables, PU as moderator and IKCB as dependent variable. Table 4-9 shows the regression values for various models. Model 1 has R value of 0.876, R square is 0.768 and adjusted R square is 0.765. This shows that 76.5% variance in IKCB can be predicted by predictors mentioned in model 1. This model is also statistically significant as its p value is 0.000 which is less than 0.05.

Table 4-9: Models between BFPTs, IKCB and PU

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .876[a] | 0.768 | 0.765 | 0.498 | 0.768 | 237.246 | 6 | 358 | 0.000 | 0.000 |
| 2 | .897[b] | 0.805 | 0.802 | 0.457 | 0.037 | 67.988 | 1 | 357 | 0.000 | 0.000 |
| 3 | .898[c] | 0.807 | 0.803 | 0.456 | 0.001 | 2.508 | 1 | 356 | 0.114 | 0.000 |
| 4 | .898[d] | 0.807 | 0.802 | 0.456 | 0.000 | 0.155 | 1 | 355 | 0.694 | 0.000 |
| 5 | .906[e] | 0.820 | 0.816 | 0.440 | 0.014 | 27.146 | 1 | 354 | 0.000 | 0.000 |
| 6 | .906[f] | 0.821 | 0.816 | 0.441 | 0.000 | 0.246 | 1 | 353 | 0.620 | 0.000 |
| a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu | | | | | | | | | | |
| b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra | | | | | | | | | | |
| c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree | | | | | | | | | | |
| d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc | | | | | | | | | | |
| e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro | | | | | | | | | | |
| f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, pu, inter_pu_extra, inter_pu_agree, inter_pu_consc, inter_pu_neuro, inter_pu_open | | | | | | | | | | |

Table 4-9a (Appendix E) shows the effect of each variable on IKCB when tested together. All the variables have significant contribution to the model as their p values are less than 0.05. The only variable which is not significant when tested together with other variables in the model is neuroticism with p value of 0.257. This p value is greater than 0.05 therefore it is not a significant variable for this model.

Table 4-9b (Appendix E) shows model 2 having big five personality traits as predictors, moderating effect of PU on extraversion and IKCB as dependent variable. value of R for this model is 0.897, R square = 0.805 and adjusted R square = 0.802.

This adjusted R square value shows that 80.2% variance in IKCB can be predicted by the variables in this model 2. Table 4-9b (Appendix E) shows the individual effect of each variable on IKCB. P value for extraversion, agreeableness, conscientiousness and inter_pu_extra are 0.018, 0.033, 0.011 and 0.000 respectively. All these values are less than 0.05 therefore these variables are significant contributors to the model. Non-significant variables are neuroticism and Open_Exper with p values 0.716 and 0.860 respectively. Both these variables are not significant because their p values which are higher than 0.05 significance level.

P value of model 3 is 0.000 which is less than 0.05 therefore it is a significant model. Value of R = 0.898, R square = 0.807 and adjusted R square = 0.803 which shows that 80.3% variance in IKCB in model 3 can be predicted by the variables mentioned in this model. Individual effect of each variable on IKCB in model 3 is shown in table 4-9c (Appendix E). All the variables are not significant contributors based on their p values which are higher than 0.05 except conscientiousness and inter_pu_extra. P values for conscientiousness and inter_pu_extra are 0.042 and 0.037 respectively which are less than 0.05 therefore these are significant variables.

Table 4-9d (Appendix E) represents model 4. This model consists of big five personality traits (independent), IKCB (dependent) and PU (moderating) between extraversion, agreeableness, conscientiousness. Regression values are shown in table 4-9. Value of R for model 4 is 0.898, R square = 0.807 and adjusted R square = 0.802. This shows that 80.2% variance in IKCB can be predicted by predictors presented in model 4. P value for this model is 0.000<.05 thus it is a significant model. Table 4-9d (Appendix E) shows the individual effect of each variable on IKCB in model 4. Based on p values, no variable is significant when tested together with other variables because p values of all variables are greater than 0.05.

Table 4-9 represents model 5 which has big five personality traits as independent variables, IKCB as dependent variable and PU as moderating variable between extraversion, agreeableness, conscientiousness and neuroticism. Regression values are shown in table 4-9. Value of R for model 5 is 0.906, R square = 0.820 and adjusted R square = 0.816. This shows that 81.6% variance in IKCB in model 5 is because of the predicting variables in this model. P value is 0.000 which is less than 0.05 therefore it is a significant model. P values of all the variables are shown in table 4-9e (Appendix E). Neuroticism and inter_pu_neuro are the only significant contributors in the model having p values less than 0.05. All other variables have p values higher than 0.05.

Table 4-9f (Appendix E) shows results for model 6. This model has big five personality traits as predictors, PU as moderator between all big five personality traits and IKCB dependent variable. Table 4-9 shows the regression results for model 6. R value for this model is 0.906, R square is 0.821 and adjusted R square is 0.816. This shows that 81.6% variance in IKCB in model 6 can be predicted by the predictors mentioned in this model. P value for this model is 0.000<.05 therefore it is a significant model. Individual contribution of all the variables involved in model 6 is shown in table 4-9f (Appendix E). Neuroticism and inter_pu_inter are the only significant contributors as their p values are 0.000<.05 and 0.000<.05 respectively. All other variables have no significant p values.

### 4.10 Relationship between BFPTs, EKDB, PEOU and PU

**Predictors**
- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**
- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**
- Explicit Knowledge Donation Behavior (EKDB)

Figure 4-9: Components of Models 1-6 between BFPTs, PEOU, PU and EKDB

Figure 4-9 shows the components of models 1-6 in table 4-10. Components of these models include big five personality traits as predictors, PEOU and PU as moderators and EKDB as dependent variable. Table 4-10 shows the results of regression model 1 which is about big five personality traits, PEOU, PU as predictors and EKDB as dependent variable. Value of R for model 1 is 0.877, R square = 0.768 and adjusted R square = 0.765. This shows that 76.5% variance in EKDB can be predicted by the predictors in model 1 which is a good sign of model fitness. P value for this model is also 0.000<.05 thus model is significant.

Table 4-10: Models between BFPTs, PEOU, PU and EKDB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .877[a] | 0.768 | 0.765 | 0.496 | 0.768 | 237.560 | 7 | 358 | 0.000 | 0.000 |
| 2 | .877[b] | 0.769 | 0.766 | 0.496 | 0.001 | 1.538 | 1 | 357 | 0.216 | 0.000 |
| 3 | .879[c] | 0.772 | 0.768 | 0.493 | 0.003 | 4.508 | 1 | 356 | 0.034 | 0.000 |
| 4 | .879[d] | 0.772 | 0.767 | 0.494 | 0.000 | 0.071 | 1 | 355 | 0.790 | 0.000 |
| 5 | .884[e] | 0.781 | 0.775 | 0.485 | 0.008 | 13.617 | 1 | 354 | 0.000 | 0.000 |
| 6 | .884[f] | 0.781 | 0.775 | 0.485 | 0.001 | 1.048 | 1 | 353 | 0.307 | 0.000 |

a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu

b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra

c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree

d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc

e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu. inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro

f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro, inter_peou_pu_open

Table 4-10a (Appendix E) represents model 1 in table 4-10. Table 4-10a (Appendix E) shows the effect of each variable on EKDB when analyzed together. These values show that all the variables namely extraversion, agreeableness, conscientiousness and Open_Exper are significant contributors to the model because their p values are less than 0.05 except neuroticism. P value for neuroticism is greater than 0.05 therefore it is not a significant variable.

Table 4-10b (Appendix E) presents model 2 from table 4-10. Components of this model are big five personality traits, PEOU and PU as moderators between extraversion and EKDB and EKDB is dependent variable. Regression values for this model are shown in table 4-10. value of R = 0.877, R square = 0.769 and adjusted R square = 0.766. This shows that 76.6% variance in EKDB can be predicted by this model. Model is significant as well as p = 0.000<.05. Table 4-10b (Appendix E) shows the individual effect of each variable on EKDB when tested together. Neuroticism (p = 0.414>.05) and inter_peou_pu_extra (p = 0.216>.05) are not significant variables based on their p values. Other four variables are significant.

Table 4-10c (Appendix E) shows the model 3 from table 4-10. This model shows big five personality traits as predictors, IKDB as dependent variable and moderating effect of PEOU and PU on extraversion and agreeableness. Value of R for this model is 0.879, R square = 0.772 and adjusted R square = 0.768. Adjusted R square shows that 76.8% variance in EKDB can be predicted by this model. Significance of the model is also proved at 0.05 level as p value is 0.000. Individual effect of each variable on EKDB is shown in table 4-10c (Appendix E). Significant variables include agreeableness (p = 0.000<.05), conscientiousness (p = 0.003<.05), Open_Exper (p = 0.008<.05), inter_peou_pu_extra (p = 0.021<.05) and inter_peou_pu_agree (p = 0.034<.05). Non-significant variables are extraversion (p = 0.348>.05) and neuroticism (p = 0.540>.05).

Table 4-10d (Appendix E) is presenting the relationships between independent variables (big five personality traits), moderating variables (PEOU and PU) and dependent variables (EKDB) in model 4. Regression values for this model are shown in table 4-10. Value of R = 0.879, R square = 0.772 and adjusted R square = 0.767. This means that 76.7% variance in EKDB can be predicted by variables mentioned in model 4. P value for this model is 0.000 which is less than 0.05 hence it is a significant model. Individual values of p for each variable are shown in table 4-10d (Appendix E). Agreeableness (p = 0.000<.05), Open_Exper (p = 0.007<.05) and inter_peou_pu_extra (p = 0.035<.05) are the significant variables based on their p values. Remaining all variables are not significant when tested together with other variables.

Table 4-10e (Appendix E) represents model 5 in table 4-10. This model is about big five personality traits as predictors, PU and PEOU acting as moderators between extraversion, agreeableness, conscientiousness, neuroticism and EKDB (dependent variable). Value of R for this model is 0.884, R square = 0.781, adjusted R square = 0.775 and p = 0.000. Adjusted R square shows that 77.5% variance in EKDB can be predicted by predictors in model 5 and p value shows that model is statistically significant. Effect of each variable in model 5 on EKDB is shown in table 4-10e (Appendix E). Agreeableness (p = 0.000<.05), neuroticism (p = 0.001<.05), Open_Exper (p = 0.003<.05), inter_peou_pu_extra (p = 0.041<.05), inter_peou_pu_agree (p = 0.014<.05) and inter_peou_pu_neuro (p = 0.000<.05) are all significant variables because of their p values. Extraversion (p = 0.460), conscientiousness (p = 0.237) and inter_peou_pu_consc (p = 0.802) are not significant variables as their p values are greater than significance level of 0.05.

Results of model 6 from table 4-10 is presented in table 4-10f (Appendix E). This model is about predicting EKDB through big five personality traits (independent), and PU and PEOU as moderators. Value of R for this model is 0.884, R square = 0.781 and adjusted R square = 0.775. P value for this model is 0.000. These values show that model is significant and 77.5% variance in EKDB can be predicted by variables from this model.

Table 4-10f (Appendix E) is about the effects of each variable on EKDB when tested together with other variables. P values for agreeableness, neuroticism, inter_peou_pu_agree, inter_peou_neuro are 0.000, 0.001, 0.008 and 0.000 respectively. All these p values are less than significance level (0.05) therefore are significant variables. P value for extraversion (0.246), conscientiousness (0.153), Open_Exper (0.531), inter_peou_pu_extra (0.302), inter_peou_pu_consc (0.942) and inter_peou_pu_open (0.307) are greater than 0.05 therefore these variables are statistically not significant contributors to the model.

### 4.11 Relationship between BFPTs, EKCB, PEOU and PU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 4-10: Components of Models 1-6 between BFPTs, PEOU, PU and EKCB

Figure 4-10 shows the components or variables used in models 1-6 in table 4-11. Variables include big five personality traits as independent variables, PEOU and PU as moderators between big five personality traits and EKCB and EKCB as dependent variable. Model 1 from table 4-11 is about the effect of big five personality traits, PEOU and PU on EKCB. Value of R for model 1 is 0.874, R square = 0.764 and adjusted R square = 0.761 which shows that 76.1% variance in EKCB can be predicted by predictors in model 1. P value for this model is 0.000<.05 thus showing the significance of the model.

Table 4-11: Models between BFPTs, PEOU, PU and EKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .874[a] | 0.764 | 0.761 | 0.502 | 0.764 | 231.802 | 7 | 358 | 0.000 | 0.000 |
| 2 | .874[b] | 0.765 | 0.761 | 0.502 | 0.001 | 0.804 | 1 | 357 | 0.371 | 0.000 |
| 3 | .875[c] | 0.765 | 0.761 | 0.502 | 0.001 | 1.292 | 1 | 356 | 0.257 | 0.000 |
| 4 | .875[d] | 0.766 | 0.760 | 0.502 | 0.000 | 0.428 | 1 | 355 | 0.514 | 0.000 |
| 5 | .879[e] | 0.773 | 0.768 | 0.495 | 0.008 | 12.086 | 1 | 354 | 0.001 | 0.000 |
| 6 | .880[f] | 0.774 | 0.767 | 0.495 | 0.000 | 0.289 | 1 | 353 | 0.591 | 0.000 |
| a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu | | | | | | | | | | |
| b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra | | | | | | | | | | |
| c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree | | | | | | | | | | |
| d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc | | | | | | | | | | |
| e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro | | | | | | | | | | |
| f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro, inter_peou_pu_open | | | | | | | | | | |

Table 4-11a (Appendix E) presents model 1 results. Table 4-11a (Appendix E) shows the effects of each variable individually on EKCB. All the variables have p values less than 0.05 except neuroticism. P value for neuroticism is 0.250 which shows that this variable is not significant contributor to the model than the remaining predictors. All other predictors have significant contribution to the model.

Table 4-11b (Appendix E) shows the effect of PEOU and PU as moderating variables on extraversion and EKCB. Table 4-11b (Appendix E) shows the results of regression analysis. Value of R = 0.874, R square = 0.765 and adjusted R square = 0.761. This shows that 76.1% variance in EKCB can be predicted by this model 2. P value is significant as well having value of 0.000<.05. Table 4-11b (Appendix E) shows the individual effect of each variable on EKCB. P values for extraversion, agreeableness, conscientiousness and Open_Exper are 0.000, 0.000, 0.003 and 0.006 respectively. All these variables have p values less than 0.05 which shows their significance. Neuroticism (p = 0.201) and inter_peou_pu_extra (p = 0.371) are both not significant based on their p values which are greater than 0.05.

Table 4-11c (Appendix E) represents results of model 3 which has big five personality traits as predictors, EKCB as dependent and PEOU and PU as moderating variables between extraversion, agreeableness and EKCB. Table 4-11 shows the regression results for this model. Value of R for this model is 0.875, R square = 0.765 and adjusted R square = 0.761. This shows the good fitness of the model because 76.1% variance in EKCB can be predicted by this model. P value for this model is also less than 0.05 thus showing the significance of the model. Table 4-11c (Appendix E) shows the effects of each variable on EKCB. Extraversion, neuroticism, inter_peou_pu_extra and inter_peou_pu_agree are not significant contributors based on their p values which are higher than 0.05. All other variables have significant p values which makes them significant contributors to the model.

Table 4-11d (Appendix E) presents model 4 from table 4-11. R value for this model is 0.875, R square is 0.766 and adjusted R square is 0.760. This shows that 76.0% variance in EKCB can be predicted by the factors mentioned in this model. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Table 4-11d (Appendix E) shows the effects of each variable on EKCB individually. Agreeableness ($p = 0.001<.05$) and Open_Exper ($p = 0.004<.05$) are the significant contributors in this model based on their p values. Extraversion ($p = 0.084>.05$), conscientiousness ($p = 0.311>.05$), neuroticism ($p = 0.250>.05$), Inter_peou_pu_extra ($p = 0.312>.05$), inter_peou_pu_agree ($p = 0.214>.05$) and inter_peou_pu_consc ($p = 0.514>.05$) are all not significant contributors because their p values are greater than 0.05.

Table 4-11e (Appendix E) presents the model 5. Regression values for this model are shown in table 4-11. This model consists of big five personality traits as independent variables, EKCB as dependent variable and PEOU and PU are the moderating variables, moderating the relationships between extraversion, agreeableness, conscientiousness, neuroticism and EKCB. Regression value for this model is 0.879 which shows a good correlation. Value of R square = 0.773 and adjusted R square = 0.768. This shows that 76.8% variance in EKCB can be predicted by this model. P value for the model is 0.000 which shows the statistical significance. Table 4-11e (Appendix E) shows the effect of each variable on EKCB in model 5. Agreeableness, neuroticism, Open_Exper, inter_peou_pu_agree and inter_peou_pu_neuro are all significant contributors to the model based on their p values. Whereas extraversion, conscientiousness, inter_peou_pu_extra and inter_peou_pu_consc are not significant variables because of their p values which are higher than 0.05.

Results for model 6 from table 4-11 is presented in table 4-11f (Appendix E). This model consists of big five personality traits as predictors, PEOU and PU as moderators and EKCB as dependent variable. Regression results are show in in table 4-11. R value for this model is 0.880, R square = 0.774 and adjusted R square = 0.767 which shows that 76.7% variance in EKCB can be predicted by the predictors in model 6. This model is statistically significant as well (p = 0.000<.05). Individual effect of each variable on EKCB is shown in table 4-11f (Appendix E). Agreeableness (p = 0.000<.05), neuroticism (p = 0.001<.05), inter_peou_pu_agree (p = 0.036<.05) and inter_peou_pu_neuro (p = 0.001<.05) are all significant variables in this model. Remaining variables are not significant because their p values are greater than 0.05.

### 4.12 Relationship between BFPTs, IKDB, PEOU and PU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 4-11: Components of Models 1-6 between BFPTs, PEOU, PU and IKDB

Figure 4-11 shows the components used in models 1-6 in table 4-12. Components used are big five personality traits as independent variables, PEOU and PU as moderating variables and IKDB as dependent variable. Table 4-12 shows the model 1 which is about the effect of big five personality traits, PEOU and PU on IKDB. Regression value for model 1 is 0.866, R square = 0.750 and adjusted R square = 0.747. This shows that 74.7% variance in IKDB can be predicted by this model. P value for this model also shows its statistical significance.

Table 4-12: Models between BFPTs, IKDB, PEOU and PU

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .866[a] | 0.750 | 0.747 | 0.523 | 0.750 | 215.330 | 7 | 358 | 0.000 | 0.000 |
| 2 | .866[b] | 0.750 | 0.746 | 0.524 | 0.000 | 0.019 | 1 | 357 | 0.890 | 0.000 |
| 3 | .868[c] | 0.753 | 0.748 | 0.522 | 0.003 | 3.760 | 1 | 356 | 0.053 | 0.000 |
| 4 | .869[d] | 0.755 | 0.749 | 0.521 | 0.002 | 2.415 | 1 | 355 | 0.121 | 0.000 |
| 5 | .873[e] | 0.763 | 0.757 | 0.513 | 0.008 | 11.959 | 1 | 354 | 0.001 | 0.000 |
| 6 | .874[f] | 0.763 | 0.757 | 0.513 | 0.000 | 0.660 | 1 | 353 | 0.417 | 0.000 |

a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu

b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra

c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree

d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc

e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro

f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro, inter_peou_pu_open

Model 1 results are presented in table 4-12. Effect of each variable on IKDB in this model is shown in table 4-12a (Appendix E). All the predictors of this model have significant contribution to the model except neuroticism. This significance is based on the p values of each variable. P values for extraversion, agreeableness, conscientiousness and Open_Exper are 0.000, 0.000, 0.013 and 0.010 respectively. All these values are less than 0.05 which shows the significance of each variable. P value for neuroticism is 0.312>0.5 therefore it is not a significant variable.

Individual results of each variable in model 2 from table 4-12 are presented in table 4-12b (Appendix E). Regression values for this model are as follows: R = 0.866, R square = 0.750 and adjusted R square = 0.746. This shows that 74.6% variance in IKDB can be predicted by this model which is a sign of good fitness of the model. Model 2 is statistically significant as well because its p value is 0.000 which is less than 0.05. Effect of each variable on IKDB is shown in table 4-12b (Appendix E). Extraversion, agreeableness, conscientiousness, Open_Exper and inter_peou_pu_extra are all significant contributors as their p values are less than 0.05. The only non-significant variable is neuroticism whose p value is 0.308>.05.

Model 3 is about big five personality traits as predictors, PEOU and PU as moderating variables, moderating the relationship between extraversion and agreeableness and IKDB (dependent variable). Table 4-12c (Appendix E) is the presentation of results for this model. Value of R for model 3 is 0.868, R square = 0.753 and adjusted R square = 0.748. Adjusted R square shows that 74.8% variance in IKDB can be predicted by this model which shows model fitness. P value for the model is 0.000 which is less than 0.05 therefore this model is statistically significant. Individual effect of each variable is shown in table 4-12c (Appendix E). Agreeableness (p = 0.000), conscientiousness (p = 0.006) and Open_Exper (p = 0.012) are the significant contributors in the model as their p values are less than 0.05. non-significant variables are extraversion (p = 0.195>.05), neuroticism (p = 0.405>.05), inter_peou_pu_extra (p = 0.054>.05) and inter_peou_pu_agree (p = 0.053>.05).

Table 4-12d (Appendix E) presents results of model 4 from table 4-12. Regression values for this model are shown in table 4-12. Value of R = 0.869, R square = 0.755 and adjusted R square = 0.749. This means that 74.9% variance in IKDB can be predicted by predictors of this model. P value for this model is 0.000<.05 therefore model 4 is statistically significant. Table 4-12d (Appendix E) shows the individual effect of each variable on IKDB. Agreeableness, Open_Exper and inter_peou_pu_agree are the only significant contributors based on their p values which are less than 0.05. All other variables are considered as not significant contributors to the model because their p values are higher than 0.05.

Model 5 from table 4-12 is presented in table 4-12e (Appendix E). This model shows the relationships between big five personality traits, PEOU, PU and IKDB. Regression values for model 5 are shown in table 4-12. Value of R = 0.873, R square = 0.763 and adjusted R square = 0.757. Variance in IKDB can be predicted up to 75.7% through this model which is a good fitness of the model. Statistical significance is also proved through p value which is 0.000<.05. Effect of each variable on IKDB is shown in table 4-12e (Appendix E). P values for agreeableness, neuroticism, Open_Exper, inter_peou_pu_agree and inter_peou_pu_neuro are 0.000, 0.001, 0.003, 0.001 and 0.001 respectively. All these values are significant as these are less than 0.05. Non-significant variables are extraversion (p = 0.144>.05), conscientiousness (p = 0.950>.05), inter_peou_pu_extra (p = 0.197>.05) and inter_peou_pu_consc (p = 0.120>.05).

Results for model 6 from table 4-12 are presented in table 4-12f (Appendix E). This model contains big five personality traits as predictors, PU and PEOU as moderating variables between personality traits and IKDB and IKDB itself as dependent variable. Value of R for this mode is 0.874, R square = 0.763 and adjusted R square = 0.757. This value of adjusted R square shows that 75.7% variance in IKDB can be predicted by this model which is considered good for model fitness. P value of model 6 is 0.000<.05 thus also showing its statistical significance. Table 4-12f (Appendix E) shows the effect of each variable on IKDB. Agreeableness, neuroticism, inter_peou_pu_agree and inter_peou_pu_neuro are the significant contributors to the model as their p values are less than 0.05. Non-significant variables include extraversion, conscientiousness, Open_Exper, inter_peou_pu_extra, inter_peou_pu_consc and inter_peou_pu_open. All these are not significant variables have p values higher than 0.05.

### 4.13 Relationship between BFPTs, IKCB , PEOU and PU

**Predictors**

- Extraversion
- Agreeableness
- Conscientiousness
- Neuroticism
- Openness to Experience

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 4-12: Components of Models 1-6 between BFPTs, PEOU, PU and IKCB

Figure 4-12 shows the components of models 1-6. Components include big five personality traits (dependent variable), PEOU and PU (moderating variables) and IKCB (dependent variable). Table 4-13 shows model 1 which is about regression between big five personality traits, PEOU, PU and IKCB. Value of R for this model is 0.876,, R square = 0.768 and adjusted R square = 0.765. This shows that 76.5% variance in IKCB can be predicted by this model. Value of p is 0.000<.05 which shows the statistical significance of the model.

Table 4-13: Models between BFPTs, PEOU, PU and IKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .876[a] | 0.768 | 0.765 | 0.498 | 0.768 | 237.246 | 7 | 358 | 0.000 | 0.000 |
| 2 | .876[b] | 0.768 | 0.764 | 0.498 | 0.000 | 0.127 | 1 | 357 | 0.722 | 0.000 |
| 3 | .878[c] | 0.771 | 0.766 | 0.496 | 0.003 | 4.114 | 1 | 356 | 0.043 | 0.000 |
| 4 | .878[d] | 0.771 | 0.766 | 0.497 | 0.000 | 0.003 | 1 | 355 | 0.959 | 0.000 |
| 5 | .883[e] | 0.780 | 0.774 | 0.488 | 0.009 | 14.468 | 1 | 354 | 0.000 | 0.000 |
| 6 | .883[f] | 0.780 | 0.774 | 0.488 | 0.000 | 0.205 | 1 | 353 | 0.651 | 0.000 |

a. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu

b. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra

c. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree

d. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc

e. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro

f. Predictors: (Constant), Open_Exper, Neuroticism, Extraversion, Agreeableness, Conscientiousness, peou, pu, inter_peou_pu_extra, inter_peou_pu_agree, inter_peou_pu_consc, inter_peou_pu_neuro, inter_peou_pu_open

Individual effect of each variable on IKCB is shown in table 4-13a (Appendix E). In this model, extraversion, agreeableness, conscientiousness and open_Exper are all significant contributors to the model because their p values are less than 0.05. The only predictor which has no significant value is neuroticism. P value for neuroticism is 0.257 which is greater than 0.05 significance level.

Model 2 shows the moderating effect of PEOU and PU on extraversion and IKCB besides the effect of big five personality traits on IKCB. Regression values for this model are shown in table 4-13. R value for this model is 0.876, R square value = 0.768 and adjusted R square value is 0.764. This shows that 76.4% variance in IKCB can be predicted by the predictors in model 2. P value is $0.000<.05$ which shows the statistical significance of the model. Table 4-13b (Appendix E) shows the effect of each variable on IKCB. Extraversion ($p = 0.000<.05$), agreeableness ($p = 0.000<.05$) and conscientiousness ($p = 0.001<.05$) are the significant contributors to the model based on their p values. Non-significant variables are neuroticism ($p = 0.240>.05$), Open_Exper (p = 0.092>.05) and inter_peou_pu_extra (p = 0.722>.05).

Results of model 3 from table 4-13 are shown in table 4-13c (Appendix E). This model consists of big five personality traits, PEO and PU as moderators between extraversion, agreeableness and IKCB and IKCB as dependent variable. Regression values are shown in table 4-13. Value of R for this model is 0.878, R square = 0.771 and adjusted R square = 0.766. This shows that 76.6% variance in IKCB can be predicted by this model. P value for this model is 0.000 which is less than 0.05 thus it is a statistically significant model. Results for effect of each variable on IKCB are shown in table 4-13c (Appendix E). P values for agreeableness, conscientiousness, inter_peou_pu_extra and inter_peou-pu_agree are 0.000, 0.000, 0.040 and 0.043 respectively. All these p values are less than 0.05 which shows their statistical significance. Non-significant variables are extraversion, neuroticism and Open_Exper and their p values are 0.113, 0.327 and 0.074. The p values for non-significant variables are greater than 0.05 therefore they are considered as not significant.

Results of model 4 from table 4-13 are shown in table 4-13d (Appendix E). This model is about moderating effect of PEOU and PU on extraversion, agreeableness, conscientiousness and IKCB besides other two big five personality traits and their relationship with dependent variable (IKCB). Regression values for this model are shown in table 4-13. Value of R for model 4 is 0.878, R square = 0.771 and adjusted R square = 0.766. This results in 76.6% variance in IKCB due to model 4. P value for model 4 is 0.000<.05 which shows that this model is statistically significant. Individual effect of each variable on IKCB is shown in table 4-13d (Appendix E). Agreeableness and inter_peou_pu_extraversion are the significant variables in this model based on their p values which are less than 0.05. Other variables in this model have p values higher than 0.05 which shows their statistical insignificance.

Table 4-13e (Appendix E) presents model 5 from table 4-13 which is about the effects of big five personality traits as independent variables on IKCB (dependent variable). This model also analyzes the moderating effect of PEOU and PU on big five personality traits except openness to experience and IKCB. Regression values for this model are shown in table 4-13. Value of R = 0.883, R square = 0.780 and adjusted

R square = 0.774. Adjusted R square value shows that 77.4% variance in IKCB can be predicted by variables in this model. P value for this model is also less than 0.05 showing the statistically significance of model 5. Effect of each variable individually on IKCB is shown in table 4-13e (Appendix E). This table shows that agreeableness ($p = 0.000$), neuroticism ($p = 0.000$), Open_Exper ($p = 0.037$), inter_peou_pu_agree ($p = 0.028$) and inter_peou_pu_neuro ($p = 0.000$) are the significant variables based on their p values which are less than 0.05. Non-significant variables include extraversion ($p = 0.202 > .05$), conscientiousness ($p = 0.087 > .05$), inter_peou_pu_extra ($p = 0.057 > .05$) and inter_peou_pu_consc ($p = 0.942 > .05$).

Table 4-13f (Appendix E) presents model 6 which is about effect of big five personality traits on IKCB and moderating effect of PEOU and PU between all big five personality traits and IKCB. Regression values for this model are shown in table 4-13. Value of R = 0.883, R square = 0.780 and adjusted R square = 0.774. This shows that 77.4% variance in IKCB can be predicted by this model. P value is $0.000 < .05$ which shows statistically significance of the model. Individual effect of each variable on IKCB is shown in table 4-13f (Appendix E). Agreeableness ($p = 0.000 < .05$), neuroticism ($p = 0.000 < .05$), inter_peou_pu_agree ($p = 0.028 < .05$) and inter_peou_pu_neuro ($p = 0.000 < .05$) are all significant variable because of their p values. Non-significant variables in this model are extraversion, conscientiousness, Open_Exper, inter_peou_pu_extra, inter_peou_pu_consc and inter_peou_pu_open.

### 4.14 Summary of Chapter

This chapter reported the big five personality traits of Malaysian SEs. Chapter also summarized the results between BFPTs as independent variable, explicit knowledge donation and collection and implicit knowledge donation and collection as dependent variables. Impact of moderating variables (PEOU and PU) were also analyzed. Results were shown in a way that BFPTs were used as independent variable throughout the analysis. However, dependent variables were entered into the analysis one by one like first relationship between BFPTs and EKDB was analyzed, then between BFPTs and EKCB, then BFPTs and IKDB and then between BFPTs and IKCB. Similarly, moderating variables PEOU and PU were introduced one at a time and at the end, both were put together for analysis. Results indicated that personality traits have an impact on KSB of Software Engineers. In addition, PU and PEOU played a statistically significant moderating roles.

# CHAPTER 5

# RESULTS – WORK DESIGN CHARACTERISTICS AND KNOWLEDGE SHARING BEHAVIOR

## 5.0 Overview

In this chapter, results between work design characteristics, Knowledge Sharing Behavior (KSB) and Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) are discussed. In this chapter, independent variable is work design characteristics. Work characteristics include task characteristics, knowledge characteristics, social characteristics and contextual characteristics. All the characteristics acted as independent variables. Dependent variables are Explicit Knowledge Donation Behavior (EKDB), Explicit Knowledge Collection Behavior (EKCB), Implicit Knowledge Donation Behavior (IKDB) and Implicit Knowledge Collection Behavior (IKCB). Moderating variables are PEOU and PU.

This chapter is divided into four sections based on the variables used for analysis. Results are shown in the following pattern: First, relationships between task characteristics, KSB and moderating variables are shown (Part I). Then results between knowledge characteristics, knowledge sharing behavior and moderating variables are shown (Part II). Similarly, results are shown between social characteristics, KSB and moderating variables (Part III) and at the end between contextual characteristics, KSB and moderating variables (Part IV). This chapter will help to answer research questions 2a, 2b and 3b.

## 5.1 Work Design Characteristics of Malaysian SEs

Table 5-1 reports mean score and stand deviations of work design characteristics. Based on the findings, leading work design characteristics are task identity (mean = 3.88, SD = 1.02), feedback from job (mean = 3.88, SD = 1.04), skill variety (mean = 3.88, SD = 1.05), received interdependence (mean = 3.88, SD = 1.04) and software and tools used (mean = 3.88, SD = 1.06). Some other important work design characteristics include specialization (mean = 3.87, SD = 1.05), information processing (mean = 3.85, SD = 1.06), task variety (mean = 3.83, SD = 1.03), problem solving (mean = 3.82, SD = 1.07), feedback from others (mean = 3.82, SD = 1.06) and work method autonomy (mean = 3.80, SD = 1.06).

Table 5-1: Work Design Characteristics of Malaysian SEs

| **Descriptive Statistics** | | | |
|---|---|---|---|
| **Factor Name** | **N** | **Mean** | **SD** |
| Task Identity | 384 | 3.88 | 1.02 |
| Feedback from Job | 384 | 3.88 | 1.04 |
| Skill Variety | 384 | 3.88 | 1.05 |
| Received Interdependence | 384 | 3.88 | 1.04 |
| Software and Tools Used | 384 | 3.88 | 1.06 |
| Specialization | 384 | 3.87 | 1.05 |
| Information Processing | 384 | 3.85 | 1.06 |
| Task Variety | 384 | 3.83 | 1.03 |
| Problem Solving | 384 | 3.82 | 1.07 |
| Feedback from Others | 384 | 3.82 | 1.06 |
| Work Method Autonomy | 384 | 3.80 | 1.06 |
| Task Significance | 384 | 3.79 | 1.09 |
| Initiated Interdependence | 384 | 3.79 | 1.06 |
| Working Conditions | 384 | 3.79 | 1.06 |
| Decision Making Authority | 384 | 3.78 | 1.06 |
| Social Support | 384 | 3.78 | 1.06 |
| Work Schedule Autonomy | 384 | 3.77 | 1.09 |
| Job Complexity | 384 | 2.36 | 1.10 |
| Physical Demands | 384 | 2.29 | 0.95 |

## PART I – TASK CHARACTERISTICS and KSB

### 5.2 Relationship between Task Characteristics, PEOU and EKDB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-1: Components of Models 1-8 between task characteristics, PEOU and EKDB

Figure 5-1 shows the components used in models 1-8 in table 5-2. Components used in these models are task characteristics, PEOU and EKDB. Model 1 in table 5-2 is about regression results between task characteristics and EKDB. Value of R for this model is 0.841, R square = 0.707 and adjusted R square = 0.701. This shows that 70.1% variance in EKDB can be predicted by this model. P value is also 0.000 which is less than .05 which shows the statistical significance of the model.

Table 5-2: Models between Task Characteristics, PEOU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .841[a] | 0.707 | 0.701 | 0.560 | 0.707 | 122.523 | 8 | 356 | 0.000 | 0.000 |
| 2 | .844[b] | 0.712 | 0.705 | 0.556 | 0.005 | 6.249 | 1 | 355 | 0.013 | 0.000 |
| 3 | .846[c] | 0.715 | 0.708 | 0.553 | 0.004 | 4.591 | 1 | 354 | 0.033 | 0.000 |
| 4 | .846[d] | 0.717 | 0.709 | 0.553 | 0.001 | 1.393 | 1 | 353 | 0.239 | 0.000 |
| 5 | .847[e] | 0.717 | 0.708 | 0.553 | 0.001 | 0.858 | 1 | 352 | 0.355 | 0.000 |
| 6 | .847[f] | 0.717 | 0.708 | 0.554 | 0.000 | 0.045 | 1 | 351 | 0.832 | 0.000 |
| 7 | .847[g] | 0.718 | 0.708 | 0.553 | 0.001 | 1.175 | 1 | 350 | 0.279 | 0.000 |
| 8 | .848[h] | 0.719 | 0.708 | 0.554 | 0.001 | 0.748 | 1 | 349 | 0.388 | 0.000 |
| a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv | | | | | | | | | | |
| f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts | | | | | | | | | | |
| g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti | | | | | | | | | | |
| h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti, inter_peou_fj | | | | | | | | | | |

Table 5-2a (Appendix F) shows the effect of each variable on EKDB. Des_Mal_Aut, Task_Var, Task_Sig and Task_identity are the significant variables in this model as their p values are less than .05. Non-significant variables are Work_Sch_Aut, Work_Method_Aut and Feedbck_Job. These variables are not significant because their p values are higher than .05 significance level.

Table 5-2b (Appendix F) is about model which consists of task characteristics, PEOU as moderating variable between work schedule autonomy and EKDB (dependent variable). Regression values for this model are shown in table 5-2b (Appendix F). Value of R = 0.844, R square = 0.712 and adjusted R square = 0.705

which shows that 71.2% variance in EKDB can be predicted by model 2. P value for this model is 0.000<.05 which means that this model is statistically significant. Table 5-2b (Appendix F) shows the individual effect of each variable on EKDB. Des_Mal_Aut (p = 0.008<.05), Task_Var (p = 0.032<.05), Task_Sig (p = 0.000<.05), Task_Identity (p = 0.026<.05) and inter_peou_wsa (p = 0.013<.05) are the significant variables based on their p values in this model. Non-significant variables are Work_Sch_Aut (p = 0.410>.05), Work_Method_Aut (p = 0.110>.05) and Feedbck_Job (p = 0.085>.05). This insignificance is based on the p values of these variables.

Table 5-2c (Appendix F) presents model 3 from table 5-2. This model shows the relationship between task characteristics and EKDB and the effect of moderating variable (PEOU) on the relationship between work schedule autonomy, decision making autonomy and EKDB. Value of R for this model is 0.846 which shows that it is highly correlated. R square is 0.715 and adjusted R square = 0.708. This value of adjusted R square shows that 71.5% variance in EKDB can be predicted by variables in this model. p value is also less than .05 therefore model is significant. Effect of each variable on EKDB is shown in table 5-2c (Appendix F). Dec_Mal_Aut, Task_Var, Task_Sig, Task_Identity, inter_peou_dma are the significant variables. Their p values are 0.002, 0.022, 0.000, 0.030 and 0.033 respectively. All these values are less than .05 therefore they are statistically significant. P values of Work_Sch_Aut, Work_Method_Aut, Feedbck_Job and inter_peou_wsa are 0.097, 0.107, 0.084 and 0.072 respectively. All these values are greater than .05 therefore these variables are not significant in this model.

Model 4 is presented in table 5-2d (Appendix F). This model shows the relationship between task characteristics and EKDB, and the moderating effect of PEOU on work schedule autonomy, decision making autonomy, work method autonomy and EKDB. Results of regression are presented in table 5-2. Value of R = 0.846, R square = 0.717 and adjusted R square = 0.709. This shows that 70.9% variance in EKDB can be predicted by variables in this model. P value for this model is 0.000 which is less than .05. This p value of model 4 shows its statistical significance. Effect of each variable in EKDB is shown in table 5-2d (Appendix F). Task_Var (p = 0.022), Task_Sig (p = 0.000), Task_Identity (p = 0.023) and inter_peou_wsa (p = 0.038) are the significant variables in this model as their p values are less than .05. Non-significant variables are the ones whose p values are greater than .05. These variables are Work_Sch_Aut (p = 0.053), Des_Mal_Aut (p = 0.073), Work_Method_Aut (p = 0.651), Feedbck_Job (p = 0.112), inter_peou_dma (p = 0.345) and inter_peou_wma (p = 0.239).

Table 5-2e (Appendix F) presents model 5 which is about job characteristics as predictors, EKDB as dependent and POEOU as moderating variable. Regression values for this model are shown in table 5-2. Value of R for this model is 0.847, R square = 0.717 and adjusted R square = 0.708. This shows that 70.8% variance in EKDB can be predicted by this model. P value is 0.000<.05 showing the statistically significance of the model. Individual effect of each independent variable in model on EKDB is shown in table 5-2e (Appendix F). Work_Sch_Aut, Task_Sig, Task_Identity and inter_peou_wsa are the significant variables in the model because their p values are less than .05. Remaining all variables are not significant based on their p values.

Table 5-2f (Appendix F) presents model 6 from table 5-2. This model is about the relationship between task characteristics and EKDB, moderating effect of PEOU on work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and EKDB. Regression results of this model are shown in table 5-2. R value for this model is 0.847, R square = 0.717 and adjusted r square = 0.708. This value of adjusted R square shows that 70.8% variance in EKDB can be predicted by variables in this model. P value which is 0.000<.05 also shows the statistical significance of the model. Individual effects of each variable from model 6 on EKDB are shown in table 5-2f (Appendix F). Work_Sch_Aut (p = 0.038<.05), task_identity (p = 0.02<.05) and inter_peou_wsa (p = 0.027<.05) are the significant variables because of their p values. Non-significant variables are Des_Mal_Aut (p = 0.244>.05), Work_Method_Aut (p = 0.990>.05), Task_Var (p = 0.132>.05), Task_Sig (p = 0.116>.05), Feedbck_Job (p = 0.119>.05), inter_peou_dma (p = 0.715>.05), inter_peou_wma (p = 0.532>.05), inter_peou_tv (p = 0.466>.05) and inter_peou_ts (p = 0.832>.05). Insignificance of these variables is based on their p values.

Table 5-2g (Appendix F) presents model 7 from table 5-2. This model is about the relationships between task characteristic and EKDB, and moderating effect of PEOU between all task characteristics except feedback from job and EKDB. Results of hierarchical multiple regression are shown in table 5-2g (Appendix F). R value for this model is 0.847, R square = 0.718 and adjusted R square = 0.708.This shows that 70.8% variance in EKDB can be predicted by the predictors in this model. Model 7 is statistically significant as well because p = 0.000<.05. Effect of each variable on EKDB is shown in table 5-2g (Appendix F). Work_Sch_Aut (p = 0.032) and inter_peou_wsa (p = 0.023) are the only significant variables in this model as their p values are less than .05. All other variables are statistically not significant because their p values are higher than .05.

Model 8 from table 5-2 is presented through table 5-2h (Appendix F). This model is about the effect of task characteristics on EKDB and moderating impact of PEOU between all task characteristics and EKDB. Results of regression for this model are shown in table 5-2. Value of R = 0.848, R square = 0.719 and adjusted R square = 0.708. This shows that 70.8% variance in EKDB can be predicted by this model which is a sign of good model fitness. P value also shows that model 8 is statistically significant as p = 0.000<.05. Individual effect of each variable on EKDB is shown in table 5-2h (Appendix F). P values for Work_Sch_Aut, Task_Identity and inter_peou_wsa are 0.038, 0.046 and 0.029 respectively. These values are less than .05 therefore these variables are statistically significant in this model. All other variables are statistically not significant based on their p values.

## 5.3 Relationship between Task Characteristics, PEOU and EKCB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-2: Components of Models 1-8 between task characteristics, PEOU and EKCB

Figure 5-2 presents the components used in models 1-8 in table 5-3. Components used in these models are task characteristics (independent), PEOU (moderating) and EKCB (dependent). Table 5-3 shows the regression results for models 1-8. Regression results for model is as follows: value of R = 0.838, R square = 0.702 and adjusted r square = 0.696. This shows that 69.6% variance in EKCB can be predicted by independent variables in model 1. Value of p for this model is 0.000 which is less than .05 therefore model is statistically significant.

Table 5-3: Models between Task Characteristics, PEOU and EKCB

| **Model Summary** | | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | | p |
| 1 | .838[a] | 0.702 | 0.696 | 0.566 | 0.702 | 119.614 | 8 | 356 | 0.000 | | 0.000 |
| 2 | .841[b] | 0.707 | 0.700 | 0.562 | 0.005 | 6.481 | 1 | 355 | 0.011 | | 0.000 |
| 3 | .843[c] | 0.711 | 0.703 | 0.559 | 0.004 | 4.324 | 1 | 354 | 0.038 | | 0.000 |
| 4 | .843[d] | 0.711 | 0.703 | 0.560 | 0.000 | 0.414 | 1 | 353 | 0.520 | | 0.000 |
| 5 | .843[e] | 0.711 | 0.702 | 0.560 | 0.000 | 0.052 | 1 | 352 | 0.820 | | 0.000 |
| 6 | .844[f] | 0.712 | 0.702 | 0.561 | 0.001 | 0.793 | 1 | 351 | 0.374 | | 0.000 |
| 7 | .845[g] | 0.714 | 0.703 | 0.559 | 0.002 | 2.832 | 1 | 350 | 0.093 | | 0.000 |
| 8 | .845[h] | 0.715 | 0.703 | 0.559 | 0.001 | 0.933 | 1 | 349 | 0.335 | | 0.000 |
| a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou | | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa | | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma | | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma | | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv | | | | | | | | | | | |
| f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts | | | | | | | | | | | |
| g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti | | | | | | | | | | | |
| h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti, inter_peou_fj | | | | | | | | | | | |

Table 5-3 presents model 1. This model is about the relationships between task characteristics as predictors and EKCB as dependent variable. Table 5-3a (Appendix F) shows the effect of each variable on EKCB. Des_Mal_Aut ($p = 0.003<.05$), Task_Var ($p = 0.003<.05$), Task_Sig ($p = 0.001<.05$) and Task_Identity ($p = 0.032<.05$) are the significant variables in this model based on their p values. Non-significant variables include Work_Sch_Aut ($p = 0.951>.05$), Work_Method_Aut ($p = 0.205>.05$) and Feedbck_Job ($p = 0.319>.05$). Insignificance of these variables is based on their p values which are higher than .05.

Model 2 from table 5-3 is presented in table 5-3b (Appendix F). This model is about the relationships between task characteristics and EKCB and moderating effect of PEOU on work schedule autonomy and EKCB. Regression results for this model are shown in table 5-3. Value of R for model 2 is 0.841, R square = 0.707 and adjusted R square = 0.700. This shows that 70% variance in EKCB can be predicted by variables in this model. Statistical significance of model 2 is evident from p value which is 0.000<.05. Individual effect of each variable on EKCB is shown in table 5-3b (Appendix F). Des_Mal_Aut, Task_Var, Task_Sig and inter_peou_wsa are the significant variables in this model because their p values are less than .05. Work_Sch_Aut, Work_Method_Aut, Task_Identity and Feedbck_Job are not significant variables based on their p values which are higher than .05.

Model 3 is presented in table 5-3c (Appendix F). Components of this mode are task characteristics as independent variables, PEOU as moderating and EKCB as dependent variable. Regression values for this model are shown in table 5-3. R = 0.843, R square = 0.711 and adjusted R square = 0.703 which shows that 70.3% variance in EKCB can be predicted by the variables in model 3. P value also shows the statistical significance of the model because p = 0.000<.05. Effect of each variable on EKCB is shown in table 5-3c (Appendix F). Des_Mal_Aut (p = 0.002<.05), Task_Var (p = 0.002<.05), Task_Sig (p = 0.000<.05) and inter_peou_dma (p = 0.038<.05) are the significant variables in this model because their p values are lower than .05. P values for non-significant variables Work_Sch_Aut, Work_Method_Aut, Task_Identity, Feedbck_Job and inter_peou_wsa are 0.090, 0.116, 0.060, 0.297 and 0.083 respectively. All these values are greater than .05 therefore these variables are considered as not significant variables.

Table 5-3d (Appendix F) shows the components and their relationship in model 4. Components involved in this model are task characteristics, PEOU and KCB as independent, moderating and dependent variables. Regression results for this model are shown in table 5.3. R value for this model is 0.843, R square = 0.711 and adjusted R square = 0.703. This shows the fitness of the model and based on adjusted R square value, it is proved that this model is a good fit because 70.3% variance in EKCB can be predicted by the variables in model 4. P value for this model is 0.000<.05

highlighting the statistical significance of the model. Effect of each variable of model 4 on EKCB is shown in table 5-3d (Appendix F). Des_Mal_Aut, Task_Var and Task_Sig are the significant variables in this model. Their statistical significance is calculated on their p values (i.e., <.05). Non-significant variables are Work_Sch_Aut, Work_Method_Aut, Task_Identity, Feedbck_Job, inter_peou_wsa, inter_peou_dma and inter_peou_wma. These variables are not significant in model 4 because their p values are greater than .05.

Model 5 is presented in table 5.3e (Appendix F). This model is about the relationship between task characteristics and EKCB, and moderating effect of PEOU between work schedule autonomy, decision making autonomy, work method autonomy, task variety and EKCB. Results of hierarchical multiple regression are shown in table 5-3. Value of R for this model is 0.843, R square = 0.711 and adjusted R square = 0.702. This value of adjusted R square shows that 70.2% variance in EKCB can be predicted by predictors in model 5. P value for this model is 0.000 which is less than .05 thus showing the statistical significance of the model. Individual effect of each predictor on EKCB is shown in table 5-3e (Appendix F). Task_Sig is the only predictor whose p value is less than .05 and is considered as statistically significant variable. All other predictors have p value>.05 therefore are statistically not significant.

Table 5-3f (Appendix F) presents model 6 from table 5-3. This model is about the moderating effect of PEOU on the relationship between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and EKCB. Regression results for this model are shown in table 5-3. Value of R for this model is 0.844, R square = 0.712 and adjusted R square = 0.702. This shows that 70.25 variance in EKCB can be predicted by this model. P value for this model is 0.000<.05 thus showing statistical significance of the model. Results of effect of each variable on EKCB in the model is shown in table 5-3f (Appendix F). Task_Sig is the only statistically significant variable in the model based on its p value. All other variables have p value which is greater than .05 therefore are not significant predictors in model 6.

Model 7 is presented in table 5-3g (Appendix F). This model is about the moderating effect of PEOU between all task characteristics except feedback from job (independent variables) and EKCB (dependent variable). Results of regression are shown in table 5-3. Value of R = 0.845, R square = 0.714 and adjusted R square = 0.703. This shows that 70.3% variance in EKCB can be predicted by predictors in model 7. P value for this model is 0.000<.05 which shows the statistical significance of the model. Table 5-3g (Appendix F) shows the individual effect of each h variable on EKCB. Work_Sch_Aut (p = 0.047<.05), Task Identity (p = 0.025<.05) and inter_peou_wsa (p = 0.044<.05) are the significant variables in this model. All other variables are statistically not significant based on their p values which are higher than .05.

Table 5-3h (Appendix F) presents model 8 from table 5-3. This model is about the moderating effect of PEOU between the relationship of task characteristics and EKCB. Results of regression for this model are shown in table 5-3. R value for this model is 0.845, R square = 0.715 and adjusted R square = 0.703. This shows that 70.3% variance in EKCB can be predicted by variables in model 8. P value for model 8 is 0.000<.05 showing the statistical significance of the model. Individual effect of each variable on EKCB is shown in table 5-3h (Appendix F). Task_Identity (p = 0.015<.05) is the only variable in this model which is significant based on its p value. All other variables have p value greater than .05.

## 5.4 Relationship between Task Characteristics, PEOU and IKDB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-3: Components of Models 1-8 between task characteristics, PEOU and IKDB

Figure 5-3 presents the components of model 1-8 from table 5-4. Components which are involved in this model are task characteristics as independent variables, PEOU as moderating variable and IKDB as dependent variable. Hierarchical multiple regression results are shown in table 5-4. Regression values for model 1 are as follows: R + 0.838, R square = 0.702 and adjusted R square = 0.696. This shows that 69.6% variance in IKDB can be predicted by independent variables in model 1. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model.

Table 5-4: Models between Task Characteristics, PEOU and IKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .838[a] | 0.702 | 0.696 | 0.573 | 0.702 | 119.720 | 8 | 356 | 0.000 | 0.000 |
| 2 | .843[b] | 0.710 | 0.704 | 0.566 | 0.008 | 10.174 | 1 | 355 | 0.002 | 0.000 |
| 3 | .845[c] | 0.713 | 0.706 | 0.564 | 0.003 | 3.936 | 1 | 354 | 0.048 | 0.000 |
| 4 | .845[d] | 0.715 | 0.707 | 0.563 | 0.001 | 1.613 | 1 | 353 | 0.205 | 0.000 |
| 5 | .845[e] | 0.715 | 0.706 | 0.564 | 0.000 | 0.252 | 1 | 352 | 0.616 | 0.000 |
| 6 | .846[f] | 0.716 | 0.706 | 0.564 | 0.001 | 0.942 | 1 | 351 | 0.332 | 0.000 |
| 7 | .846[g] | 0.716 | 0.706 | 0.564 | 0.001 | 0.764 | 1 | 350 | 0.383 | 0.000 |
| 8 | .847[h] | 0.717 | 0.706 | 0.564 | 0.001 | 1.062 | 1 | 349 | 0.304 | 0.000 |

a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou

b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa

c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma

d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma

e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv

f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts

g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti

h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti, inter_peou_fj

Table 5-4 shows the relationship between task characteristics and IKDB. Table 5-4a (Appendix F) shows the individual effect of each variable on IKDB. Statistically significant variables are Des_Mal_Aut ($p = 0.002 < .05$), Task_Var ($p = 0.022 < .05$), Task_Sig ($p = 0.006 < .05$) and Feedbck_Job ($p = 0.025 < .05$). Statistically not significant variables in model 1 are Work_Sch_Aut ($p = 0.409 > .05$), Work_Method_Aut ($p = 0.269 > .05$) and Task_Identity ($p = 0.150 > .05$). Statistical significance and insignificance is calculated on .05 level of p value. P values higher than .05 are considered as statistically insignificance whereas values which are less than .05 are considered to be statistically significant.

Table 5-4b (Appendix F) presents model 2 from table 5-4. This model is about the moderating effect of PEOU on the relationship between work schedule autonomy and IKDB. Value of R for this model is 0.843, R square = 0.710 and adjusted R square = 0.704. This shows that 70.4% variance in IKDB can be predicted by predictors in this model. P value is 0.000<.05 which shows the statistical significance of the model. Individual effect of each variable on IKDB in this model are shown in table 5-4b (Appendix F). P value for statistically significant variables Des_Mal_Aut, Task_Var, Task_Sig, Feedbck_Job and inter_peou_wsa are 0.004, 0.016, 0.001, 0.021 and 0.002 respectively. All these values are less than .05 therefore considered as statistically significant variables in this model. Non-significant variables whose p values are higher than .05 are Work_Sch_Aut, Work_Method_Aut and Task_Identity and their p values are 0.108, 0.140 and 0.240 respectively.

Table 5-4c (Appendix F) presents model 3 from table 5-4. This model is about the moderating effect of PEOU on the relationship between decision making autonomy and IKDB. Regression values for this model are shown in table 5-4. Value of R for this model is 0.845, R square = 0.713 and adjusted R square = 0.706. This shows that 70.6% variance in IKDB can be predicted by predictors in model 3. P value for the model is 0.000 which is less than .05 thus showing the statistical significance of the model. Individual effect of each variable on IKDB in model 3 is shown in table 5-4c (Appendix F). Des_Mal_Aut, Task_Var, Feedbck_Job and inter_peou_dma are the statistically significant predictors in this model. Statistically non-significant variables are Work_Sch_Aut, Work_Method_Aut, Task_Identity and inter_peou_wsa.

Model 4 which is about the moderating effect of PEOU on the relationship between work method autonomy and IKDB is presented in table 5-4d (Appendix F). Regression results for this model are shown in table 5-4. Value of R = 0.845, R square = 0.715 and adjusted R square = 0.707. This adjusted R square value shows that 70.07% variance in IKDB can be predicted by variables in model 4. P value for this model is 0.000<.-5 thus showing statistical significance of the model. Individual effect of each variable on IKDB is shown in table 5-4d (Appendix F). Task_Var (p = 0.011), Task_Sig (p = 0.003) and Feedbck_Job (p = 0.030) are the significant predictors in this model as their p values are less than .05. Insignificant variables in model 4 are Work_Sch_Aut (p = 0.124), Des_Mal_Aut (p = 0.085), Work_Method_Aut (p = 0.559), Task_Identity (p = 0.219), inter_peou_wsa (p = 0.061), inter_peou_dma (p = 0.444) and inter_peou_wma (p = 0.205). Insignificance is calculated on the basis of p value.

Model 5 from table 5-4 is presented in table 5-4e (Appendix F). This model is about the moderating effect of PEOU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and IKDB. Regression values for this model are shown in table 5-4. R value = 0.845, R square = 0.715 and adjusted R square = 0.706. This shows that 70.6% variance in IKDB can be predicted by the variables in this model. P value which is 0.000<.05 shows the statistical significance of model 5. Effect of each variable on IKDB is shown in table 5-4e (Appendix F). Task_Sig (p = 0.003<.05) and Feedbck_Job (p = 0.032<.05) are the only two statistically significant variables whereas all other variables have p values greater than .05 therefore are statistically not significant.

Model 6 from table 5-4 is shown in table 5-4f (Appendix F). This model is about the relationship between task characteristics and IKDB, moderating effect of PEOU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and IKDB. Value of R for this model is 0.846, R square = 0.716 and adjusted R square = 0.706. These values are shown in table 5-4. Value of adjusted R square shows that 71.6% variance in IKDB can be predicted by the variables in model 6. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Table 5-4f (Appendix F) shows the individual effect of each variable on IKDB. Task_Sig (p = 0.045<.05), Feedbck_Job (p = 0.028<.05) and inter_peou_wsa (p = 0.044<.05) are the statistically significant variables in this model. All other variables are statistically not significant based on their p values which are higher than .05.

Table 5-4g (Appendix F) presents model 7 from table 5-4. This model is about the relationships between task characteristics and IKDB, moderating effect of PEOU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance, task identity and IKDB. Regression results for this model are shown in table 5-4. Value of R for this model is 0.846, R square = 0.716 and adjusted R square = 0.706. This shows that 70.6% variance in IKDB can be predicted by predictors in model 7. P value also shows the statistical significance of the model which is 0.000<.05. Effect of each variable individually on IKDB is shown in table 5-4g (Appendix F). Feedbck_Job (p = 0.030<.05) and inter_peou_wsa (p = 0.040<.05) are the only two statistically significant variables whereas all other predictors are statistically not significant based on their p values.

Table 5-4h (Appendix F) presents model 8 from table 5-4. This model is about the relationship between task characteristics and IKDB, moderating effect of POU on the relationships between task characteristics and IKDB. Regression results for this model are shown in table 5-4. R value = 0.847, R square = 0.717 and adjusted R square = 0.706. This shows that 70.6% variance in IKDB can be predicted by model 8 predictors. P value of this model is 0.000<.05 thus showing the statistically significance. Individual effect of each variable on IKDB is shown in table 5-4h (Appendix F). Based on p values, none of the predictors in model 8 are statistically significant because p value of each independent variable is greater than .05.

### 5.5 Relationship between Task Characteristics, PEOU and IKCB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-4: Components of Models 1-8 between task characteristics, PEOU and IKCB

Figure 5-4 shows the components of models 1-8. These components include task characteristics as predictors, PEOU as moderating variable and IKCB as dependent variable. Regression results for these models are shown in table 5-5. First model is about the relationship between task characteristics and IKCB. Value of R for this model is 0.840, R square = 0.705 and adjusted R square = 0.699. This shows that 69.9% variance in IKCB can be predicted by variables in model 1. P value for this model is 0.000 which is less than .05 thus showing the statistically significance of the model.

Table 5-5: Models between Task Characteristics, PEOU and IKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .840[a] | 0.705 | 0.699 | 0.563 | 0.705 | 121.506 | 8 | 356 | 0.000 | 0.000 |
| 2 | .845[b] | 0.713 | 0.707 | 0.556 | 0.008 | 10.504 | 1 | 355 | 0.001 | 0.000 |
| 3 | .847[c] | 0.717 | 0.710 | 0.553 | 0.004 | 4.719 | 1 | 354 | 0.031 | 0.000 |
| 4 | .848[d] | 0.719 | 0.711 | 0.552 | 0.002 | 2.637 | 1 | 353 | 0.105 | 0.000 |
| 5 | .848[e] | 0.719 | 0.711 | 0.552 | 0.000 | 0.160 | 1 | 352 | 0.690 | 0.000 |
| 6 | .849[f] | 0.720 | 0.711 | 0.552 | 0.001 | 1.217 | 1 | 351 | 0.271 | 0.000 |
| 7 | .849[g] | 0.722 | 0.711 | 0.552 | 0.001 | 1.584 | 1 | 350 | 0.209 | 0.000 |
| 8 | .850[h] | 0.722 | 0.711 | 0.552 | 0.000 | 0.231 | 1 | 349 | 0.631 | 0.000 |
| a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv | | | | | | | | | | |
| f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts | | | | | | | | | | |
| g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti | | | | | | | | | | |
| h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, inter_peou_wsa, inter_peou_dma, inter_peou_wma, inter_peou_tv, inter_peou_ts, inter_peou_ti, inter_peou_fj | | | | | | | | | | |

Table 5-5 presents model 1 which is about the relationship between task characteristics and IKCB. Table 5-5a (Appendix F) shows the individual effect of these variables (predictors from model 1) on IKCB. Des_Mal_Aut (p = 0.002), Task_Var (p = 0.000), Task_Sig (p = 0.016) and Task_Identity (p = 0.015) are the statistically significant variables for this model because their p values are lower than .05. Statistically non-significant variables include Work_Sch_Aut (p = 0.865), Work_Method_Aut (p = 0.109) and Feedbck_Job (p = 0.244). This non-significance is based on p value criteria which is that higher than .05 p value.

Model 2 is presented through table 5-5b (Appendix F). This model is about the relationship between task characteristics and IKCB, moderating effect of PEOU on the relationship between work schedule autonomy and IKCB. Regression results for this model are shown in table 5-5. Value of R = 0.845, R square = 0.713 and adjusted R square = 0.707. This shows that 70.7% variance in IKCB can be predicted by variables in model 2. P value for the model is 0.000<.05 which shows the statistical significance of the model. Individual effect of each variable on IKCB in model 2 are shown in table 5-5b (Appendix F). Des_Mal_Aut, Work_Method_Aut, Task_Variety, Task_Sig, Task_Identity and inter_peou_wsa are statistically significant variables in model 2. Work_Sch_Aut and Feedbck_Job are statistically not significant variables because their p values are higher than .05.

Model 3 from table 5-5 is presented in table 5-5c (Appendix F). This model is about the relationship between task characteristics and IKCB, moderating effect of PEOU on the relationships between work schedule autonomy, decision making autonomy and IKCB. Value of R for this model is 0.847, R square = 0.717 and adjusted R square = 0.710. This shows that 71% variance in IKCB can be predicted by this model which is a sign of good model fitness. P value for this model is 0.000<.05 thus showing statistically significance of the model. Effect of each variable of model 3 on IKCB is shown in table 5-5c (Appendix F). P value for Des_Mal_Aut, Work_Method_Aut, Task_Var, Task_Sig, Task_Identity and inter_peou_dma are 0.001, 0.046, 0.000, 0.007, 0.034 and 0.031 respectively. All these variables are statistically significant as their p values are less than .05. P value for statistically non-significant variables Work_Sch_Aut and Feedbck_Job are 0.104 and 0.214 respectively. Both these values are greater than .05.

Model 4 from table 5-5 is presented in table 5-5d (Appendix F). This model is about the relationships between task characteristics and IKCB, moderating effect of PEOU on the relationship between work schedule autonomy, decision making autonomy, work method autonomy and IKCB. Regression results are shown in table 5-5. Value of R for this model is 0.848, R square = 0.719 and adjusted R square = 0.711. This shown that 71.1% variance in IKCB can be predicted by predictors in model 4. P value of this model is 0.000<.05 thus showing statistically significance of the model. Individual effect of each effect predictor on IKCB is shown in table 5-5d (Appendix F). Work_Sch_Aut, Task_Var, Task_Sig, Task_Identity and inter_peou_wsa are the statistically significant variables in model 4 based on their p value which is less than .05. Non-significant predictors are Des_Mal_Aut, Work_Method_Aut, Feedbck_Job, inter_peou_dma and inter_peou_wma.

Model 5 from table 5-5 is presented in table 5-5e (Appendix F). This model is the relationships between task characteristics and IKCB, moderating effect of PEOU on the relationship between work schedule autonomy, decision making autonomy, work method autonomy, task variety and IKCB. Regression results of this model are presented in table 5-5. R value is 0.848, R square = 0.719 and adjusted R square = 0.711. This value of adjusted R square shows that 71.1% variance in IKCB can be predicted by this model. P value of this model is 0.000 which is less than .05 thus showing the statistical significance of model 5. Effect of each variable on IKCB in model 5 are shown in table 5-5e (Appendix F). P values for Work_Sch_Aut, Task_Var, Task_Sig, Task_Identity and inter_peou_wsa are 0.038, 0.048, 0.008, 0.024 and 0.029 respectively. All these p values are less than .05 which shows their statistical significance. P values for statistically non-significant variables are 0.172 (Des_Mal_Aut), 0.615 (Work_Method_Aut), 0.302 (Feedbck_Job), 0.660 (inter_peou_dma), 0.188 (inter_peou_wma) and 0.690 (inter_peou_tv).

Table 5-5f (Appendix F) presents model 6 from table 5-5. This model shows the relationships between task characteristics and IKCB, moderating effect of PEOU on the relationship between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and IKCB. Table 5-5 shows the regression values for this model. Value of R = 0.849, R square = 0.720 and adjusted R square = 0.711. This value of adjusted R square shows that 71.1% variance in IKCB can be predicted by this model. This shows the high model good fitness. Value of p for this model also shows that this model is statistically significant as p value is 0.000<.05. Table 5-5f (Appendix F) shows the individual effect of each predictor on IKCB in model 6. Work_Sch_Aut (p = 0.032<.05), Task_Sig (p = 0.046<.05), Task_Identity (p = 0.025<.05) and inter_peou_wsa (p = 0.023<.05) are the significant predictors in this model. Non-significant predictors are Des_Mal_Aut (p = 0.288>.05), Work_Method_Aut (p = 0.832>.05), Task_Var (p = 0.197>.05), Feedbck_Job (p = 0.279>.05), inter_peou_dma (p = 0.859>.05), inter_peou_wma (p = 0.314>.05), inter_peou_tv (p = 0.888>.05) and inter_peou_ts (p = 0.271>.05).

Table 5-5g (Appendix F) presents model 7. This model is about the relationship between task characteristics and IKCB, moderating effect of PEOU between all task characteristics except feedback from job and IKCB. Regression results for this model are shown in table 5-5. Value of R = 0.849, R square = 0.722 and adjusted R square = 0.711. This shows that 71.1% variance in IKCB can be predicted by this model. P value is also less than .05 which shows the statistical significance of the model. Individual effect of each independent variable of model 7 on IKCB is shown in table 5-5g (Appendix F). Statistically significant variables are Work_Sch_Aut (p = 0.026) and inter_peou_wsa (p = 0.019). All other variables are statistically not significant in this model based on their p values.

Table 5-5h (Appendix F) presents model 8 from table 5-5. This model is about the relationships between task characteristics and IKCB, moderating effect of PEOU on all relationships between task characteristics and IKCB. Regression results for this model are shown in table 5-5. R value for this model is 0.850, R square is 0.722 and adjusted R square is 0.711. This means that 71.1% variance in IKCB can be predicted by this model. P value for the model is 0.000 which shows its statistical significance. Table 5-5h (Appendix F) shows the effect of each variable individually on IKCB. Work_Sch_Aut (p = 0.024<.05) and inter_peou_wsa (p = 0.018<.05) are the only two variables in this model with statistical significance. All other predictors in this model have no statistical significance based on their p values.

## 5.6 Relationship between Task Characteristics, PU and EKDB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-5: Components of Models 1-8 between task characteristics, PU and EKDB

Figure 5-5 presents the components of models 1-8 used in table 5-6. These models consist of task characteristics as predictors, PU as moderating variable and EKDB as dependent variable. Model 1 is presented in table 5-6a (Appendix F). This model shows the relationship between task characteristics and EKDB. Regression results for this model are shown in table 5-6. Value of R for this model is 0.841, R square = 0.707 and adjusted R square = 0.701. This adjusted R square value shows that 70.1% variance in EKDB can be predicted by this model. P value for this model is 0.000 which is less than .05 thus showing the statistical significance of the model.

Table 5-6: Models between Task Characteristics, PU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .841[a] | 0.707 | 0.701 | 0.560 | 0.707 | 122.523 | 8 | 356 | 0.000 | 0.000 |
| 2 | .885[b] | 0.784 | 0.779 | 0.482 | 0.077 | 126.020 | 1 | 355 | 0.000 | 0.000 |
| 3 | .887[c] | 0.787 | 0.781 | 0.479 | 0.003 | 5.510 | 1 | 354 | 0.019 | 0.000 |
| 4 | .887[d] | 0.787 | 0.781 | 0.479 | 0.000 | 0.558 | 1 | 353 | 0.456 | 0.000 |
| 5 | .887[e] | 0.787 | 0.781 | 0.479 | 0.000 | 0.327 | 1 | 352 | 0.568 | 0.000 |
| 6 | .887[f] | 0.787 | 0.780 | 0.480 | 0.000 | 0.157 | 1 | 351 | 0.692 | 0.000 |
| 7 | .888[g] | 0.788 | 0.780 | 0.480 | 0.001 | 1.260 | 1 | 350 | 0.262 | 0.000 |
| 8 | .888[h] | 0.789 | 0.780 | 0.480 | 0.001 | 1.061 | 1 | 349 | 0.304 | 0.000 |
| a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv | | | | | | | | | | |
| f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts | | | | | | | | | | |
| g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti | | | | | | | | | | |
| h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti, inter_pu_fj | | | | | | | | | | |

Individual effect of each predictor (task characteristics) on EKDB in model is shown in table 5-6a (Appendix F). Statistical significance and insignificance of the variables is calculated on the basis of p value. Statistically significant variables include Des_Mal_Aut ($p = 0.005 < .05$), Task_Var ($p = 0.040 < .05$), Task_Sig ($p = 0.000 < .05$) and Task_Identity ($p = 0.015 < .05$). These variables are statistically significant because their p values are less than .05. Non-significant variables whose p values are higher than .05 are Work_Sch_Aut ($p = 0.839$), Work_Method_Aut ($p = 0.189$) and Feedbck_Job ($p = 0.094$).

Table 5-6b (Appendix F) presents model 2 from table 5-6. This model is about the relationships between task characteristics and EKDB, moderating effect of PU on the relationship between work schedule autonomy and EKDB. Regression results for this model are shown in table 5-6. Value of R for this model is 0.885, R square = 0.784 and adjusted R square = 0.779. This shows that 77.9% variance in EKDB can be predicted by variables in model 2. Significance of this model is affirmed from the p value which is 0.000<.05. Individual effect of each predictor in model 2 on EKDB is shown in table 5-6b (Appendix F). P values for Work_Sch_Aut, Des_Mal_Aut, Task_Sig and inter_peou_wsa are 0.000, 0.001, 0.042 and 0.000 respectively. All these variables have p value less than .05 therefore are statistically significant. Statistically non-significant variables are Work_Method_Aut (p = 0.060>.05), Task_Var (p = 0.693>.05), Task_Identity (p = 0.146>.05) and Feedbck_Job (p = 0.187>.05).

Table 5-6c (Appendix F) presents model 3 from table 5-6. This model shows the relationship between task characteristics and EKDB, moderating effect of PU on the relationship between work schedule autonomy, decision making autonomy and EKDB. Regression results for this model are shown in table 5-6. R value for this model is 0.887, R square = 0.787 and adjusted R square = 0.781. This shows that 78.1% variance in EKDB can be predicted by this model. P value also shows that model 2 is statistically significant as its p = 0.000<.05. Individual effect of each variable on EKDB in model 2 is shown in table 5-6c (Appendix F). Only one predictor i.e., inter_pu_dma (p = 0.019<.05) is statistically significant in this model based on p value. All other variables are statistically not significant based on their p value.

Model 4 from table 5-6 is presented in table 5-6d (Appendix F). This model is about the relationship between task characteristics and EKDB as independent and dependent variables respectively. This model also shows the effect of moderating variable (PU) between work schedule autonomy, decision making autonomy, work method autonomy and EKDB. Results for hierarchical regression test are shown in table 5-6. Value of R for this model is 0.887, R square = 0.787 and adjusted R square = 0.781. This shows that 78.1% variance in EKDB can be predicted by variables in model 4. P value for this model is 0.000<.05 thus showing the significance of the model. Result for the effect of each variable separately on EKDB is shown in table 5-6d (Appendix F). Task_Sig ($p = 0.045$) is the only statistically significant variable in this model as its p value is less than .05. All other variables have p value greater than .05 thus are statistically not significant.

Model 5 is about the relationship between task characteristics (independent variables), EKDB (dependent variable) and moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and EKDB. This model is presented in table 5-6. Results for hierarchical regression are shown in table 5-6. Value of R for this model is 0.887, R square = 0.787 and adjusted R square = 0.781. This shows that 78.1% variance in EKDB can be predicted by predictors from this model. P value is $0.000<.05$ thus shows the significance of the model. Individual effect of each variable on EKDB is shown in table 5-6e (Appendix F). Based on p value, all the predictors are statistically not significant as their values are higher than .05 level.

Model 6 is about the relationship between task characteristics, EKDB and the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and EKDB. Model 6 is presented in table 5-6f (Appendix F). Regression results are shown in table 5-6. R value for this model 6 is 0.887, R square = 0.787 and adjusted R square = 0.780. This shows that 78% variance in EKDB can be predicted by this model's predictors. P value is $0.000<.05$ therefore shows that statistical significance of the model. Results for individual effect of each predictor of model 6 on EKDB is shown in table 5-6f (Appendix F). P value suggests that none of the predictors have statistical significance as their p values are higher than .05.

Table 5-6g (Appendix F) presents model 7 from table 5-6. This model is about the relationship between task characteristics as predictors and EKDB as dependent variable. This model also shows the moderating effect of PU on the relationships between all task characteristics and EKDB except feedback from job. Results for regression analysis for this model are shown in table 5-6. Value of R = 0.888, R square = 0.788 and adjusted R square = 0.780. This adjusted R square value shows that 78% variance in EKDB can be predicted by independent variables in model 7. P value for this model is 0.000 which is less than .05 therefore this model is statistically significant. Results for the effect of each independent variable on EKDB are shown in table 5-6g (Appendix F). This table shows that all the variables have statistically insignificance with EKDB because p value for every variable is greater than .05.

Table 5-6h (Appendix F) presents model 8 from table 5-6. This model is about the relationship between task characteristics and EKDB as independent and dependent variables respectively. Model 8 also shows the moderating effect of PU on the relationships between all task characteristics and EKDB. Regression results for this model are shown in table 5-6. Value of R for this model is 0.888, R square = 0.789 and adjusted R square = 0.780. This means that 78% variance in EKDB can be predicted by the predictors in model 8. P value for this model is 0.000 which is less than .05 level therefore model is statistically significant. Results for the effect of each independent variable on EKDB are shown in table 5-6h (Appendix F). These results show that all the variables in model 8 are statistically not significant when it comes to the relationship between independent and dependent variables. These variables are statistically not significant because their p values are higher than .05.

### 5.7 Relationship between Task Characteristics, PU and EKCB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-6: Components of Models 1-8 between task characteristics, PU and EKCB

Figure 5-6 shows the components if models 1-8 from table 5-7. These models consist of task characteristics as independent variable, PU as moderating variable and EKCB as dependent variable. Model 1 is about the relationship between task characteristics (independent) and EKCB (dependent). Results for 1st hierarchical regression model are shown in table 5-7. Value of R for this model is 0.838, R square = 0.702 and adjusted R square = 0.696. This shows that 69.6% variance in EKCB can be predicted by predictors in EKDB. P value for this mode is 0.000 which is less than .05 therefore shows that this model is statistically significant.

Table 5-7: Models between Task Characteristics, PU and EKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .838[a] | 0.702 | 0.696 | 0.566 | 0.702 | 119.614 | 8 | 356 | 0.000 | 0.000 |
| 2 | .880[b] | 0.774 | 0.769 | 0.493 | 0.073 | 114.317 | 1 | 355 | 0.000 | 0.000 |
| 3 | .882[c] | 0.778 | 0.773 | 0.489 | 0.004 | 6.198 | 1 | 354 | 0.013 | 0.000 |
| 4 | .883[d] | 0.779 | 0.773 | 0.489 | 0.001 | 1.260 | 1 | 353 | 0.262 | 0.000 |
| 5 | .883[e] | 0.779 | 0.772 | 0.490 | 0.000 | 0.003 | 1 | 352 | 0.957 | 0.000 |
| 6 | .883[f] | 0.779 | 0.771 | 0.491 | 0.000 | 0.056 | 1 | 351 | 0.813 | 0.000 |
| 7 | .883[g] | 0.781 | 0.772 | 0.490 | 0.001 | 2.327 | 1 | 350 | 0.128 | 0.000 |
| 8 | .883[h] | 0.781 | 0.772 | 0.490 | 0.000 | 0.106 | 1 | 349 | 0.745 | 0.000 |

a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu

b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa

c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma

d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma

e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv

f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts

g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti

h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti, inter_pu_fj

Table 5-7 presents model 1. This model is about the relationships between task characteristics and EKCB. Results for the effect of each predictor from model 1 on

EKCB are shown in table 5-7a (Appendix F). These results shows that Des_Mal_Aut (p = 0.003), Task_Var (p = 0.003), Task_Sig (p = 0.001) and Task_Identity (p = 0.032) are statistically significant variables in this model as their p values are less than .05. Statistically non-significant variables include Work_Sch_Aut (p = 0.951>.05), Work_Method_Aut (p = 0.205>.05) and Feedbck_Job (p = 0.319>.05).

Model 2 is presented in table 5-7b (Appendix F). This model is about the relationships between task characteristics and EKCB. Moderating effect of PU on the relationship between work schedule autonomy and EKCB are also analyzed in this model. Results for hierarchical regression are shown in table 5-7. Regression results for this model show that value of R = 0.880, R square = 0.774 and adjusted R square = 0.769. This adjusted R square value shows that 76.9% variance in EKCB can be predicted by predictors in model 2. P value for this model is 0.000<.05 thus showing statistically significance of the model. Results for the effect of each variable on EKCB is shown in table 5-7b (Appendix F). Work_Sch_Aut, Des_Mal_Aut and inter_pu_wsa are statistically significant variables in this model because their p values are less than .05. Statistically non-significant variables include Work_Method_Aut, Task_Var, Task_Sig, Task_Identity and Feedbck_Job. P values for these statistically not significant variables are higher than .05.

Table 5-7c (Appendix F) presents model 3 from table 5-7. This model is about the relationship between task characteristics as predictors and EKCB as dependent variable. This model also analyzes the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy and EKCB. Results of regression analysis for this model are shown in table 5-7. Value of R for this model is 0.882, R square = 0.778 and adjusted R square = 0.773. This value of adjusted R square shows that 77.3% variance in EKCB can be predicted by this model. P value for model 3 is 0.000 which is less than .05 thus showing its statistical significance. Results for the effect of each variable on EKCB are shown in table 5-7c (Appendix F). P values for Work_Sch_Aut, Des_Mal_Aut, Work_Method_Aut, Task_Var, Task_Sig, Task_Identity and Feedbck_Job are 0.449, 0.266, 0.134, 0.097, 0.071 and 0.314 respectively. All these p values are higher than .05 therefore all these variables are statistically not significant based on the p values.

Model 4 is about the independent and dependent variables which are task characteristics and EKCB respectively. This model also analyzes the moderating effect of PU on work schedule autonomy, decision making autonomy and work method autonomy. Table 5-7d (Appendix F) presents this model. Regression results for this model are shown in table 5-7. R value = 0.883, R square = 0.779 and adjusted R square = 0.773. This means that 77.3% variance in dependent variable (EKCB) can be predicted by independent variables in this model. Value of p = 0.000 which is less than .05 thus shows the statistical significance of the model. Table 5-7d (Appendix F) shows the individual effect of each variable on EKCB. Based on the p value of each variable, all the predictors are statistically not significant as their p values are higher than .05 significance level.

Table 5-7e (Appendix F) presents model 5 from table 5-7. This model is about the relationship between task characteristics and EKCB as independent and independent variable. This model also analyzes the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and EKCB. Results for the hierarchical regression are shown in table 5-7. Value of R for this model is 0.883, R square = 0.779 and adjusted R square = 0.772 which shows that 77.2% variance in EKCB can be predicted by variables from table 5-7. P value for this model is 0.000 which is less than .05 thus shows that statistical significance of the model. Individual effect of each predictor on EKCB is shown in table 5-7e (Appendix F). These results show that all the predictors including those having interaction effect are statistically not significant variables as their p values are higher than .05 significance level.

Table 5-7f (Appendix F) presents model 6 from table 5-7 which is about the relationship between task characteristics and EKCB. This model also shows the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and EKCB. Regression results for this model are shown in table 5-7. Value of R = 0.883, R square = 0.779 and adjusted R square = 0.771. This shows that 77.1% variance in EKCB can be predicted by model 6. P value for this model is 0.000 which is less than .05 thus showing the statistical significance of the model. Individual effect of each variable on EKCB is shown in table 5-7f (Appendix F). Results presented in table 5-7f (Appendix F) shows that none of the variables have statistical significance relationship with EKCB when tested together with all other variables. P value for all the variable is more than .05.

Table 5-7g (Appendix F) presents model 7 from table 5-7. This model is about the effect of independent variables (task characteristics) and dependent variable (EKCB). Model 6 also comprises of the moderating effect of PU on the relationship between task characteristics (all except feedback from job) and EKCB. Regression value for this model is 0.883, R square = 0.781 and adjusted R square = 0.772. This value of adjusted R square shows that 77.2% variance in EKCB can be predicted by predictors in model 7. This model is statistically significant as well because its p value is .000<.05. Effect of each variable from the model on EKCB is shown in table 5-7g (Appendix F). All the variables are statistically not significant based on their p value (which in this case is higher than .05 for all variables) when tested together with other predictors.

Model 8 is presented through table 5-7h (Appendix F) which is about the relationship between task characteristics and EKCB. Moderating effect of PU on all the relationships between task characteristics and EKCB are also presented in this model. Results for hierarchical multiple regressions are shown in table 5-7. Value of R = 0.883, adjusted r square = 0.781 and adjusted R square = 0.772 which shows that 77.2% variance in EKCB can be predicted by predictors of model 8. P value for this model is 0.000 which is less than .05 thus shows that model is statistically significant. Results for the effect of each variable individually when tested together are shown in table 5-7h (Appendix F). Based on p values, all the predictors are statistically not significant because this value for each variable is more than significance level (.05).

## 5.8 Relationship between Task Characteristics, PU and IKDB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-7: Components of Models 1-8 between task characteristics, PU and IKDB

Figure 5-7 shows the components of hierarchical multiple regression models from 5-8. Regression results for these models are shown in table 5-8. Model 1 is about the relationships between task characteristics as predictors and IKDB as dependent variable. Value of R for this model is 0.838, R square = 0.702 and adjusted R square = 0.696. This value of adjusted R square shows that 69.6% variance in IKDB can be predicted by predictors of model 1. P value of model is 0.000 which is less than .05 thus emphasizing the statistical significance of the model.

Table 5-8: Models between Task Characteristics, PU and IKDB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .838[a] | 0.702 | 0.696 | 0.573 | 0.702 | 119.720 | 8 | 356 | 0.000 | 0.000 |
| 2 | .880[b] | 0.775 | 0.770 | 0.499 | 0.073 | 115.546 | 1 | 355 | 0.000 | 0.000 |
| 3 | .882[c] | 0.778 | 0.772 | 0.496 | 0.003 | 4.088 | 1 | 354 | 0.044 | 0.000 |
| 4 | .882[d] | 0.778 | 0.771 | 0.497 | 0.000 | 0.185 | 1 | 353 | 0.667 | 0.000 |
| 5 | .882[e] | 0.778 | 0.771 | 0.498 | 0.000 | 0.009 | 1 | 352 | 0.926 | 0.000 |
| 6 | .882[f] | 0.778 | 0.771 | 0.498 | 0.000 | 0.722 | 1 | 351 | 0.396 | 0.000 |
| 7 | .883[g] | 0.780 | 0.772 | 0.497 | 0.002 | 2.611 | 1 | 350 | 0.107 | 0.000 |
| 8 | .883[h] | 0.780 | 0.771 | 0.497 | 0.000 | 0.097 | 1 | 349 | 0.756 | 0.000 |
| a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv | | | | | | | | | | |
| f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts | | | | | | | | | | |
| g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti | | | | | | | | | | |
| h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti, inter_pu_fj | | | | | | | | | | |

Effect of each variable individually on IKDB is shown in table 5-8a (Appendix F). Dc_Mal_Aut ($p = 0.002$), Task_Var ($p = 0.022$), Task_Sig ($p = 0.006$) and Feedbck_Job ($p = 0.025$) are the statistically significant contributors to this model based on their p values which are lower than .05. Statistically non-significant predictors include Work_Sch_Aut ($p = 0.409$), Work_Method_Aut ($p = 0.269$) and Task_Identity ($p = 0.150$). Statistical insignificance of these variables is based on the significance level of p which should be less than .05 for a predictor to be statistically significant.

Table 5-8b (Appendix F) presents model 2 from table 5-8. This model is about the independent, dependent and moderating variables. In this model, independent variables are task characteristics, dependent variable is IKDB and PU is moderating variable. Moderating effect of PU is analyzed on the relationship between work schedule autonomy and IKDB. Value of R = 0.880, R square = 0.775 and adjusted R square = 0.770. This shows that 77% variance in IKDB can be predictors in model 2. P value for this model is 0.000<.05 thus showing the statistically significance of the model. Effect of each variable individually on IKDB is shown in table 5-8b (Appendix F). P value of Work_Sch_Aut, Des_Mal_Aut, Feedbck_Job and inter_pu_wsa are 0.000, 0.000, 0.048 and 0.000 respectively. These p values are less than .05 thus shows the statistical significance of the model. P value for Work_Method_Aut, Task_Var, Task_Sig and Task_Identity are 0.107, 0.467, 0.251 and 0.731 respectively. All these p values are higher than .05 level therefore these variables are statistically not significant.

Model 3 from table 5-8 is presented in table 5-8c (Appendix F). This model is about the effect of task characteristics (independent variables) on IKDB (dependent variable) and the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy and IKDB. Results for regression analysis for this model are shown in table 5-8. R value = 0.882, R square = 0.778 and adjusted R square = 0.772 which shows that 77.2% variance in IKDB can be predicted by predictors of model 3. This model is statistically significant as well because of p value which is 0.000<.05. Effect of each variable on IKDB is shown in table 5-8c (Appendix F). Based on p value, only Feedbck_Job (p = 0.045) and inter_pu_dma (p = 0.044) are statistically significant whereas all other predictors are statistically not significant because of their p values which are higher than .05.

Table 5-8d (Appendix F) presents model 4 from table 5-8. This model is about the relationship between task characteristics and IKDB. Besides, this model also presents the moderating effect of PU on the relationship between work schedule autonomy, decision making autonomy, work method autonomy and IKDB. Regression results for model 4 are shown in table 5-8. R value = 0.882, R square = 0.778 and adjusted R square = 0.771. This adjusted R square value shows that 77.1% variance in IKDB can be predicted by predictors from model 4. P value for this model is also less than .05 which reflects the statistical significance of the model. Each variable's effect on IKDB is shown in table 5-8d (Appendix F). Except Feedbck_Job (p = 0.044<.-05) all other variables are statistically not significant because of the p value which should be less than .05.

Table 5-8e (Appendix F) presents model 5. This model is about the effect of task characteristics (independent) on IKDB (dependent). Model 5 also comprises of the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and IKDB. Regression results for model 5 are as follows: R = 0.882, R square = 0.778 and adjusted R square = 0.771. This value of adjusted R square shows that 77.1% variance in IKDB can be predicted by variables in this model. P value is 0.000<.05 for the model which is acceptable for statistical significance. Effect of each variable on IKDB individually when tested together with other variables is shown in table 5-8e (Appendix F). Only Feedbck_Job (p = 0.044<.05) is statistically significant variable in this model based on p value while all other variables have statistically no significance.

Model 6 from table 5-8 is presented in table 5-8f (Appendix F). This model shows the relationships between task characteristics, IKDB and PU (moderating variable). Results for hierarchical multiple regression are shown in table 5-8. Value of R = 0.882, R square = 0.778 and adjusted R square = 0.771. This shows that 77.1% variance in IKDB can be predicted by predictors from model 6. Statistical significance of the model is also proved because of p value which is 0.000<.05. Table 5-8f (Appendix F) shows the individual effect of each variable on IKDB when testes together with other predictors. Feedbck_Job (p = 0.043<.05) is the only statistically significant variable based on p value. All other variables are statistically not significant.

Table 5-8g (Appendix F) presents model 7 from table 5-8. This model is about the relationship between task characteristics and IKDB. Task characteristics are the predictors in this case whereas IKDB is the predicted variable. In addition to these variables, moderating effect of PU on the relationships between task characteristics (except feedback from job) and IKDB are also presented in this model. Value of R for this model is 0.883, R square = 0.780 and adjusted R square = 0.772. This shows that 77.2% variance in IKDB can be predicted by predictors of this model. P value for this model is 0.000 which is less than .05 this shows the statistical significance of the model. Effect of each variable on IKDB is shown in table 5-8g (Appendix F). Based on p value, all predictors in this model are statistically not significant.

Model 8 is presented in table 5-8h (Appendix F). This model is about the independent variables (task characteristics), dependent variable (IKDB) and moderating variable (PU). Moderating effect of PU was analyzed on all the relationships between task characteristics and IKDB. Regression results for this model are shown in table 5-8. Value of R = 0.883, R square = 0.780 and adjusted R square = 0.771 which shows that 77.1% variance in IKDB can be predicted by predictors of model 8. This model is statistically significant as well for the reason that its p value is 0.000<.05. Table 5-8h (Appendix F) shows the individual effect of each variable when tested together with other variables on IKDB. Individual effect of each variable when tested together with other variables is statistically not significant because all p values are higher than .05 significance level.

**5.9 Relationship between Task Characteristics, PU and IKCB**

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator:** Perceived Usefulness (PU)
**Dependent:** Implicit Knowledge Collection Behavior (IKCB)

Figure 5-8: Components of Models 1-8 between task characteristics, PU and IKCB

Figure 5-8 shows the components used in models 1-8 in table 5-9. These models include task characteristics as independent variable, IKCB as dependent variable and PU as moderating variable. Model 1 is about the relationship between task characteristics and IKCB. Regression results for this model are shown in table 5-9. Value of R = 0.840, R square = 0.705 and adjusted R square = 0.699. This value of adjusted R square shows that 69.9% variance in IKCB can be predicted by the predictors in model 1. P value for this model is 0.000 which is less than .05 therefore shows the statistical significance of the model.

Table 5-9: Models between Task Characteristics, PU and IKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .840[a] | 0.705 | 0.699 | 0.563 | 0.705 | 121.506 | 8 | 356 | 0.000 | 0.000 |
| 2 | .884[b] | 0.782 | 0.777 | 0.485 | 0.077 | 125.298 | 1 | 355 | 0.000 | 0.000 |
| 3 | .886[c] | 0.785 | 0.779 | 0.482 | 0.003 | 4.440 | 1 | 354 | 0.036 | 0.000 |
| 4 | .886[d] | 0.785 | 0.779 | 0.483 | 0.000 | 0.321 | 1 | 353 | 0.572 | 0.000 |
| 5 | .886[e] | 0.785 | 0.778 | 0.483 | 0.000 | 0.151 | 1 | 352 | 0.698 | 0.000 |
| 6 | .886[f] | 0.785 | 0.778 | 0.484 | 0.000 | 0.519 | 1 | 351 | 0.472 | 0.000 |
| 7 | .887[g] | 0.786 | 0.778 | 0.484 | 0.001 | 1.186 | 1 | 350 | 0.277 | 0.000 |
| 8 | .887[h] | 0.786 | 0.777 | 0.484 | 0.000 | 0.119 | 1 | 349 | 0.731 | 0.000 |
| a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv | | | | | | | | | | |
| f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts | | | | | | | | | | |
| g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti | | | | | | | | | | |
| h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, pu, inter_pu_wsa, inter_pu_dma, inter_pu_wma, inter_pu_tv, inter_pu_ts, inter_pu_ti, inter_pu_fj | | | | | | | | | | |

Effect of each variable on IKCB when tested together with other variables is shown in table 5-9a (Appendix F). Des_Mal_Aut (p = 0.002<.05), Task_Var (p =

0.000<.05), Task_Sig (p = 0.016<.05) and Task_Identity (p = 0.015<.05) are statistically significant variables in this model whereas Work_Sch_Aut (p = 0.865>.05), Work_Method_Aut (p = 0.109>.05) and Feedbck_Job (p = 0.244>.05) are statistically not significant because of their p values.

Table 5-9b (Appendix F) presents model 2 from table 5-9. This model is about the relationship between task characteristics and IKCB. Model 2 also shows the moderating effect of PU on the relationship between work schedule autonomy and IKCB. Table 5-9 shows the results for regression analysis for this model. R value = 0.884, R square = 0.782 and adjusted R square = 0.777. This adjusted R square value shows that 77.7% variance in IKCB can be predicted by variables of model 2. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Individual effect of each variable when tested together with other predictors on IKCB is shown in table 5-9b (Appendix F). P value for Work_Sch_Aut, Des_Mal_Aut, Work_Method_Aut, task_Var and inter_pu_wsa are 0.000, 0.000, 0.027, 0.030 and 0.000 respectively. All these p values are less than .05 which shows their statistical significance. P value for Task_Sig, Task_Identity and Feedbck_Job are 0.484, 0.146 and 0.466 respectively. These variables are statistically insignificance because their p values are higher than .05.

Model 3 is presented in table 5-9c (Appendix F). This model is about task characteristics as independent variable and IKCB as dependent variable. This model also shows the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy and IKCB. Results for regression analysis for this model are shown in table 5-9. Value of R = 0.886, R square = 0.785 and adjusted R square = 0.779. This value of adjusted R square shows that 77.9% variance in IKCB can be predicted by this model's predictors. Statistical significance of model 4 is also proved based on p value which is 0.000<.05. Table 5-9c (Appendix F) shows the effect of each variable individually on IKCB. Task_Var (p = 0.019<.05) and inter_pu_dma (p = 0.036) are the only two variables in this model which are statistically significant. Remaining all other variables are statistically not significant based on their p value.

Table 5-9 shows the regression results for model 4 which is presented in table 5-9d (Appendix F). This model is about relationships between task characteristics and IKCB. Besides, this model also shows the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy and IKCB. Value of R for this model is 0.886, R square = 0.785 and adjusted R square = 0.779. This shows that 77.9% variance in IKCB can be predicted by predictors in model 4. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Table 5-9d (Appendix F) shows the individual effect of each variable on IKCB in model 4. Task_Var ($p = 0.018 < .05$) is the only variable which is statistically significant in this model as its p value is less than .05. All other variables have p value greater than .05 which makes them statistically non-significant.

Model 5 from table 5-9 is presented in table 5-9e (Appendix F). This model is about the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and IKCB besides the relationship between task characteristics and IKCB. Results for regression analysis for this model are shown in table 5-9. R = 0.886, R square = 0.785 and adjusted R square = 0.778. This shows that 77.8% variance in IKCB can be predicted by variables of model 5. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Effect of each variable on IKCB is shown in table 5-9e (Appendix F). Based on p value of each variable, all the variables are statistically not significant as p value for every predictor is more than .05 significant level.

Table 5-9f (Appendix F) presents model 6. This model shows the moderating effect of PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and IKCB. This model also shows the relationships between task characteristics and IKCB. Results for regression results are shown in table 5-9. Value of R for this model is 0.886, R square = 0.785 and adjusted R square = 0.778. This adjusted R square value shows that 77.8% variance in IKCB can be predicted by predictors of model 6. P value for this model is $0.000 < .05$ therefore shows the statistical significance of the model.

Individual effect of each variable on IKCB in model 6 are presented in table 5-9f (Appendix F). Base on p value, all variables when tested together are statistically not significant at individual level because their p values are higher than .05 significance level.

Model 7 is about the moderating effect of PU on the relationships between task characteristics (except feedback from job) and IKCB. It also shows the relationship between task characteristics and IKCB as shown in table 5-9g (Appendix F). Results for regression analysis for this model are shown in table 5-9. Value of R = 0.887, R square = 0.786 and adjusted R square = 0.778 which means that 77.8% variance in IKCB can be predicted by independent variables in model 7. Value of p for this model is 0.000 which is less than .05 thus shows that model is statistically significant. Table 5-9g (Appendix F) presents the individual effect of each variable. All of the predictors when tested together have statistical insignificance at individual level because p value for every predictor is higher than .05.

Model 8 is presented in table 5-9h (Appendix F). This model is about the relationship between task characteristics and IKCB. Also, this model presents the moderating effect of PU on the relationships between all task characteristics and IKCB. Multiple regression results for this model are as follows: R = 0.887, R square = 0.786 and adjusted R square = 0.777. This adjusted R square value shows that 77.7 % variance in IKCB can be predicted by dependent variable in model 8. P value for this model is 0.000. This p value is less than .05 therefore shows the statistical significance of the model. Table 5-9h (Appendix F) shows the individual effect of each variable on IKCB in model 8. These values shows that when all variables are tested together in one model, none of them is statistically significant based on p value.

### 5.10 Relationship between Task Characteristics, PEOU, PU and EKDB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-9: Components of Models 1-8 between task characteristics, PEOU, PU and EKDB

Figure 5-9 presents components of models 1-8 form table 5-10. These models consist of task characteristics as independent variables, PEOU and PU as moderating variables and EKDB as dependent variable.

Model 1 is about the relationship between task characteristics and EKDB. Regression results for this model are shown in table 5-10. Value of R = 0.841, R square = 0.707 and adjusted R square = 0.701. This value of adjusted R square shows that 70.1% variance in EKDB can be predicted by predictors in model 1. P value for this model also shows its statistical significance which is 0.000<.05.

Table 5-10: Models between Task Characteristics, PEOU, PU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .841[a] | 0.707 | 0.701 | 0.560 | 0.707 | 122.523 | 9 | 356 | 0.000 | 0.000 |
| 2 | .841[b] | 0.707 | 0.700 | 0.561 | 0.000 | 0.108 | 1 | 355 | 0.743 | 0.000 |
| 3 | .841[c] | 0.708 | 0.700 | 0.560 | 0.001 | 1.388 | 1 | 354 | 0.239 | 0.000 |
| 4 | .842[d] | 0.709 | 0.701 | 0.560 | 0.001 | 1.161 | 1 | 353 | 0.282 | 0.000 |
| 5 | .842[e] | 0.709 | 0.700 | 0.561 | 0.000 | 0.368 | 1 | 352 | 0.544 | 0.000 |
| 6 | .843[f] | 0.710 | 0.700 | 0.561 | 0.001 | 0.973 | 1 | 351 | 0.324 | 0.000 |
| 7 | .843[g] | 0.710 | 0.700 | 0.561 | 0.000 | 0.521 | 1 | 350 | 0.471 | 0.000 |
| 8 | .845[h] | 0.714 | 0.702 | 0.559 | 0.003 | 3.988 | 1 | 349 | 0.047 | 0.000 |

a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu

b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa

c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma

d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma

e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv

f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts

g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti

h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti, inter_peou_pu_fj

Individual effect of each variable when tested together with other predictors is shown in table 5-10a (Appendix F). For this model, p value of Des_Mal_Aut, Task_Var, Task_Sig and Task_Identity are 0.005, 0.040, 0.000 and 0.15 respectively. These p values are lower than .05 therefore all these variables are statistically significant based on p values. Non-significant variables are Work_Sch_Aut, Work_Method_Aut and Feedbck_Job. Their p values are 0.839, 0.189 and 0.094 respectively. All of these are higher than .05 therefore considered as statistically not significant.

Model 2 is presented in table 5-10b (Appendix F) with moderating effect of PEOU and PU on the relationship between work schedule autonomy and EKDB. Besides, this model also analyzes the relationships between task characteristics and EKDB. Results for hierarchical multiple regression analysis are shown in table 5-10. For this model, value of R = 0.841, R square = 0.707 and adjusted R square = 0.700. This shows that 70% variance in EKDB can be predicted by variables in model 2. Value of p for this model is 0.000<.05 which shows that model 2 is statistically significant. Individual effect of each variable on EKDB separately is shown in table 5-10b (Appendix F). Des_Mal_Aut (p = 0.006<.05), Task_Var (p = 0.039<.05), Task_Sig (p = 0.000<.05) and Task_Identity (p = 0.016<.05) are statistically significant variables in this variables based on their p values. Statistically non-significant variables are Work_Sch_Aut (p = 0.791>.05), Work_Method_Aut (p = 0.181>.05), Feedbck_Job (p = 0.093>.05) and inter_peou_pu_wsa (p = 0.743>.05).

Table 5-10c (Appendix F) presents model 3 from table 5-10. This model is about the relationships between task characteristics and EKDB. Besides, this model also presents the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy and EKDB. Results for regression analysis for this model are shown in table 5-10. Value of R = 0.841, R square = 0.708 and adjusted R square = 0.700. This adjusted R square value shows that 70% variance in KDB can be predicted by variables in this model. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Table 5-10c (Appendix F) shows the results for the effect of each variable separately on EKDB. Des_Mal_Aut, Task_Var, Task_Sig and Task_Identity are the statistically significant variables based on their p values. Statistically non-significant variables in this model include Work_Sch_Aut, Work_Method_Aut, Feedbck_Job, inter_peou_pu_wsa and inter_peou_pu_dma. Statistical insignificance is also based on p value.

Model 4 from table 5-10 is presented in table 5-10d (Appendix F). This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy and EKDB. In addition, this model is also about the relationships between task characteristics and EKDB. Value of R for this model is 0.842, R square is 0.709 and adjusted R square is

0.701. Adjusted R square shows that 70.1% variance in EKDB can be predicted by variables of this model. Goodness of model is also proved based on p value which is 0.000<.05 which shows that model is statistically significant. Individual effect of each variable on EKDB in this model is shown in table 5-10d (Appendix F). Task_Var (p = 0.041<.05), Task_Sig (p = 0.001<.05) and Task_Identity (p = 0.012<.05) are the statistically significant variables in this model based on p value. Statistically non-significant variables are Work_Sch_Aut (p = 0.277>.05), Des_Mal_Aut (p = 0.157>.05), Work_Method_Aut (p = 0.809>.05), Feedbck_Job (p = 0.121>.05), inter_peou_pu_wsa (p = 0.175>.05), inter_peou_pu_dma (p = 0.840>.05) and inter_peou_pu_wma (p = 0.282>.05).

Table 5-10c (Appendix F) presents model 5 from table 5-10. This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and EKDB. Also, this model analyzes the relationship between task characteristics and EKDB. Results for hierarchical multiple regression test are shown in table 5-10. Value of R for this model is 0.842, R square = 0.709 and adjusted R square = 0.700. This shows that 70% variance in EKDB can be predicted by predictors in model 5. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Table 5-10e (Appendix F) shows the individual effect of each variable on KDB when tested together with other variables. Task_Sig (p = 0.000<.05) and Task_Identity (p = 0.011<.05) are the two variables in this model which are statistically significant based on their p values whereas all other variables are statistically not significant because their p values are higher than .05.

Model 6 is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and EKDB. This model is presented in table 5-10f (Appendix F). Model 6 also shows the relationship between task characteristics and EKDB. Value of R = 0.843, R square = 0.710 and adjusted R square = 0.700. This value of adjusted R square shows that 70% variance in EKDB can be predicted by independent variables of model 6. Statistical significance of this model can be analyzed from the p value which is 0.000<.05 thus showing its statistical significance.

Effect of each variable on EKDB can be seen in table 5-10f (Appendix F). Task_Sig (p = 0.012<.05) and Task_Identity (p = 0.012<.05) are the only two variables with statistical significance. All other variables Work_Sch_Aut (p = 0.224>.05), Des_Mal_Aut (p = 0.414>.05), Work_Method_Aut (p = 0.836>.05), Task_Var (p = 0.358>.05), Feedbck_Job (p = 0.118>.05), inter_peou_wsa (p = 0.140>.05), inter_peou_pu_dma (p = 0.784>.05), inter_peou_pu_wma (p = 0.572>.05), inter_peou_pu_tv (p = 0.977>.05) and inter_peou_pu_ts (p = 0.324>.05), based on p value are not statistically significant.

Table 5-10g (Appendix F) presents model 7 from table 5-10. This model is about the relationships between task characteristics and EKDB. In addition to this, model 7 also presents the moderating effect of PEOU and PU on the relationships between task characteristics (except feedback from job) and EKDB. Results for the hierarchical regression analysis are presented in table 5-10. Based on this analysis, value of R = 0.843, R square = 0.710 and adjusted R square = 0.700 which shows that 70% variance in EKDB can be predicted by variables of model 7. Value of p for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Table 5-10g (Appendix F) presents the values of individual effect of each variable when tested together. Task_Sig (p = 0.041<.05) is the only statistically significant variable because its p value is less than .05. Remaining all other variables are statistically not significant based on p value.

Table 5-10h (Appendix F) presents model 8 which is about the moderating effect of PEOU and PU on the relationships between task characteristics and EKDB. This model also presents the relationships between task characteristics (as independent variables) and EKDB (as dependent variable). Regression results for this model are shown in table 5-10. R value = 0.845, R square = 0.714 and adjusted R square = 0.702. This adjusted R square value shows that 70.2% variance in EKDB can be predicted by predictors of model 8. P value for this model is 0.000<.05 therefore showing the statistical significance of the model. Table 5-10h (Appendix F) shows the individual effect of each variable in model 8. Task_Sig (p = 0.020<.05) and Task_Identity (p = 0.016<.-5) are the two variables which are statistically significant. Other variables which are statistically not significant include Work_Sch_Aut, Des_Mal_Aut, Work_Method_Aut, Task_Var, Feedbck_Job, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti and inter_peou_pu_fj.

### 5.11 Relationship between Task Characteristics, PEOU, PU and EKCB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-10: Components of Models 1-8 between task characteristics, PEOU, PU and EKCB

Components of models 1-8 are presented in figure 5-10. These models consist of task characteristics (independent variables), PEOU and PU (moderating variables) and EKCB (dependent variable). Table 5-11 shows the results for the hierarchical multiple regressions for model 1-8. Model 1 is about the relationships between task characteristics as independent factors and EKCB as dependent variable. Value of R for this model is 0.838, R square = 0.702 and adjusted R square = 0.696. These results show that 69.6% variance in EKCB can be predicted by the predictors of model 1. P value for this model is 0.000 which should be less than .05 for statistical significance which in this case is, therefore this model is statistically significant.

Table 5-11: Models between Task Characteristics, PEOU, PU and EKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .838[a] | 0.702 | 0.696 | 0.566 | 0.702 | 119.614 | 9 | 356 | 0.000 | 0.000 |
| 2 | .838[b] | 0.702 | 0.695 | 0.567 | 0.000 | 0.180 | 1 | 355 | 0.672 | 0.000 |
| 3 | .838[c] | 0.703 | 0.695 | 0.567 | 0.001 | 1.238 | 1 | 354 | 0.267 | 0.000 |
| 4 | .838[d] | 0.703 | 0.695 | 0.567 | 0.000 | 0.186 | 1 | 353 | 0.667 | 0.000 |
| 5 | .839[e] | 0.703 | 0.694 | 0.568 | 0.000 | 0.098 | 1 | 352 | 0.754 | 0.000 |
| 6 | .840[f] | 0.705 | 0.695 | 0.567 | 0.002 | 1.982 | 1 | 351 | 0.160 | 0.000 |
| 7 | .840[g] | 0.705 | 0.694 | 0.567 | 0.001 | 0.780 | 1 | 350 | 0.378 | 0.000 |
| 8 | .841[h] | 0.708 | 0.696 | 0.566 | 0.002 | 2.823 | 1 | 349 | 0.094 | 0.000 |

a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu

b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa

c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma

d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma

e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv

f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts

g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti

h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti, inter_peou_pu_fj

Table 5-11 presents model 1. Individual effect of each predictor on EKCB in this model is shown in table 5-11a (Appendix F). P value for Des_Mal_Aut, Task_Var, Task_Sig and task_Identity are 0.003, 0.003, 0.001 and 0.032 respectively. All the values are lower than .05 significance level therefore these variables are statistically significant. Variables which are statistically not significant are Work_Sch_Aut, Work_Method_Aut and Feebck_Job. P values for these variables are 0.951, 0.205 and 0.319 respectively. These values are higher than .05 therefore are considered statistically not significant based on p values.

Model 2 is presented in figure 5-11b. This model is about the relationships between task characteristics and EKCB besides the moderating effect of PEOU and PU on the relationship between work schedule autonomy and EKCB. Regression results for this model are shown in table 5-11. Value of R for this model is 0.838, R square is 0.702 and adjusted R square is 0.695. This adjusted R square value shows that 69.5% variance in EKCB can be predicted by independent variables of this model. Value of p for model 2 is 0.000<.05 thus showing the statistical significance of the model. Table 5-11b (Appendix F) shows the individual effect of each variable on EKCB in model 2. Based on p value, Des_Mal_Aut (p = 0.004<.05), Task_Var (p = 0.003<.05), Task_Sig (p = 0.001<.05) and Task_Identity (p = 0.034<.05) are statistically significant predictors. Similarly, based on p value, statistically non-significant variables are Work_Sch_Aut (p = 0.980>.05), Work_Method_Aut (p = 0.193>.05), Feedbck_Job (p = 0.315>.05) and inter_peou_pu_wsa (p = 0.672>.05).

Table 5-11c (Appendix F) presents model 3 which is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy and EKCB. This model also analyzes the relationship between task characteristics and EKCB. Results for hierarchical multiple regression are shown in table 5-11. Regression value for this model is 0.838, R square = 0.703 and adjusted R square = 0.685. Adjusted R square shows that 69.5% variance in EKCB can be predicted by variables of model 3. P value for this model is 0.000 which is less than .05 this shows the statistical significance of the model. Individual effect of each predictor of model 3 is shown in table 5-11c (Appendix F). Des_Mal_Aut (p = 0.011<.05), Task_Var (p = 0.003<.05), Task_Sig (p = 0.001<.05) and Task_Identity (p = 0.034<.05) are statistically significant contributors to the model based on p values. Statistically non-significant predictors are Work_Sch_Aut (p = 0.338<.05), Work_Method_Aut (p = 0.168>.05), Feedbck_Job (p = 0.313>.05), inter_peou_pu_wsa (p = 0.295>.05) and inter_peou_pu_dma (p = 0.267>.05).

Table 5-11 contains regression results for model 4 which is presented in table 5-11d (Appendix F). This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy and EKCB. This model also presents the relationship between task characteristics and EKCB. Value of R for this model = 0.838, R square = 0.703 and adjusted R square = 0.695. This means that 69.5% variance in EKCB can be predicted by this model. Value of p for model 4 is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Table 5-11d (Appendix F) presents the results for the individual effect of each variable on EKCB in model 4. Task_Var, Task_Sig and Task_Identity are statistically significant variables because their p values are lower than 0.05 level. Variables which are statistically non-significant are Work_Sch_Aut, Des_Mal_Aut, Work_Method_Aut, Feedbck_Job, inter_peou_pu_wsa, inter_peou_pu_dma and inter_pou_pu_wma. All these variables are statistically not significant in this model because of their p values which are higher than 0.05.

Table 5-11e (Appendix F) presents model 5 from table 5-11 which is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and EKCB. In addition to these, relationships between task characteristics and EKCB are also presented in this model. Regression results for model 5 are shown in table 5-11. Value of R = 0.839, R square = 0.703 and adjusted R square = 0.694 which shows that 69.4% variance in EKCB can be predicted by predictors of model 5. P value is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Individual effect of each variable on EKCB in model 5 are shown in table 5-11e (Appendix F). Based on p value, Task_Sig (p = 0.001) and Task_Identity (p = 0.030) are the only statistically significant variables. All other variables are statistically not significant in this model based on their p value.

Model 6 is presented in table 5-11f (Appendix F). This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and EKCB. Results for hierarchical multiple regression are shown in table 5-11f (Appendix F). Value of R for this model is 0.840, R square = 0.705 and adjusted R square = 0.695. This shows that 69.5% variance in EKCB can be predicted by independent variables of model 6. P value is 0.000<.05 thus shows the statistical significance of the model. Table 5-11f (Appendix F) presents the individual effect of each variable on EKCB. Task_Sig (p = 0.005<.05) and Task_Identity (p = 0.033<.05) are the only two variables in this model which are statistically significant because of their p values. All other variables are statistically not significant when tested together in this model.

Table 5-11g (Appendix F) presents model 7 from table 5-11. This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance, task identity and EKCB. Besides, this model also shows the relationships between all task characteristics and EKCB. Results for hierarchical multiple regression for this model are shown in table 5-11. This table shows that R = 0.840, R square = 0.705 and adjusted R square = 0.694 which means that 69.4% variance in EKCB can be predicted by variables of model 7. P value for this model is 0.000 which is less than statistical significance level (0.05) thus model 7 is statistically significant as well. Individual effect of each variable on EKCB in model 7 is shown in table 5-11g (Appendix F). Based on p value, the only predictor which is statistically significant in this model is Task_Sig ($p = 0.024 < .05$). All other variables are statistically not significant based on their p values which are higher than 0.05 significance level.

Moderating effect of PEOU and PU on the relationships between all task characteristics and EKCB are shown in model 8 from table 5-11. This model is presented in table 5-11f (Appendix F). Besides, model also shows the relationships between all task characteristics and EKCB. Results for hierarchical multiple regression for this model are shown in table 5-11. Value of R = 0.841, R square = 0.708 and adjusted R square = 0.696. This shows that 69.6% variance in EKCB can be predicted by independent variables of model 8. Value of p for this model is 0.000 which should be less than .05 for statistical significance which in this case is so the model is statistical significant.  Table 5-11h (Appendix F) presents the individual effect of each variable and its contribution in the model. Task_Sig and Task_Identity are the two variables which are statistically significant because of their p values which are 0.013 and 0.024 respectively. Both these values are less than 0.05. Other variables which include Work_Sch_Aut, Des_Mal_Aut, Work_Method_Aut, Task_Var, Feedbck_Job, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti and inter_peou_pu_fj. All these variables are statistically not significant in this model because their p values are higher than 0.05.

### 5.12 Relationship between Task Characteristics, PEOU, PU and IKDB

**Predictors**
- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**
- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**
- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-11: Components of Models 1-8 between task characteristics, PEOU, PU and IKDB

Figure 5-11 shows the components of model 1-8. These models are based on hierarchical multiple regression analysis for the relationships between task characteristics (independent variables), PEOU and PU (moderating variables) and IKDB (dependent variable). Table 5-12 shows the regression results for these models.

Model 1 from table 5-12 is about the relationship between task characteristics and IKDB. Regression results are shown in table 5-12. Value of R for this model is 0.838, R square = 0.702 and adjusted R square = 0.696. This R values shows that there is high correlation among dependent and independent variables and adjusted R square value shows that 69.6% variance in IKDB can be predicted by this model which is a good model fit sign. P value for this model is 0.000<.05 thus shows the statistical significance of the model.

Table 5-12: Models between Task Characteristics, PEOU, PU and IKDB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .838[a] | 0.702 | 0.696 | 0.573 | 0.702 | 119.720 | 9 | 356 | 0.000 | 0.000 |
| 2 | .838[b] | 0.703 | 0.696 | 0.573 | 0.001 | 1.242 | 1 | 355 | 0.266 | 0.000 |
| 3 | .839[c] | 0.704 | 0.696 | 0.573 | 0.001 | 1.194 | 1 | 354 | 0.275 | 0.000 |
| 4 | .840[d] | 0.705 | 0.697 | 0.572 | 0.002 | 1.841 | 1 | 353 | 0.176 | 0.000 |
| 5 | .840[e] | 0.706 | 0.697 | 0.573 | 0.000 | 0.492 | 1 | 352 | 0.484 | 0.000 |
| 6 | .842[f] | 0.709 | 0.699 | 0.571 | 0.003 | 3.320 | 1 | 351 | 0.069 | 0.000 |
| 7 | .842[g] | 0.709 | 0.698 | 0.571 | 0.000 | 0.089 | 1 | 350 | 0.766 | 0.000 |
| 8 | .843[h] | 0.711 | 0.700 | 0.570 | 0.003 | 3.071 | 1 | 349 | 0.081 | 0.000 |

a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu

b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa

c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma

d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma

e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv

f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts

g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti

h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti, inter_peou_pu_fj

Table 5-12 presents model 1. Individual effect of each independent variable of model 1 on IKDB is shown in table 5-12a (Appendix F). P value for Des_Mal_Aut, Task_Var, Task_Sig and Feebbck_Job are 0.002, 0.022, 0.006 and 0.025 respectively. All these p values are less than 0.05 therefore these predictors are statistically significant. Statistically non-significant variables are Work_Sch_Aut, Work_Method_Aut and Task_Identity and their p values are 0.409, 0.126 and 0.150 respectively. P values of these variables are greater than 0.05 thus are considered statistically not significant for this model.

Model 2 is presented in table 5-12b (Appendix F). This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy and IKDB. Besides, this model also analyzes the relationships between task characteristics and IKDB. Regression results for this model are shown in table 5-12. Value of R for model 2 is 0.838, R square = 0.703 and adjusted R square = 0.696. This means that 69.6% variance in IKDB can be predicted by predictors of model 2. P value for this model is 0.000 which is less than .05 this showing the statistical significance. Table 5-12b (Appendix F) shows the individual effect of each variable on IKDB in model 2. Statistically significant variables based on p value are Des_Mal_Aut (p = 0.003<.05), Task_Var (p = 0.019<.05), Task_Sig (p = 0.004<.05) and Feedbck_Job (p = 0.023<.05). Predictors which are statistically not significant are Work_Sch_Aut (p = 0.302>.05), Work_Method_Aut (p = 0.224>.05), task_Identity (p = 0.165>.05) and inter_peou_pu_wsa (p = 0.266>.05).

Table 5-12c (Appendix F) presents model 3 from table 5-12. This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy and IKDB. This model also analyzes the relationships between task characteristics and IKDB. Results for hierarchical multiple regression are shown in table 5-12. Value of R = 0.839, R square = 0.704 and adjusted R square = 0.696 which shows that 69.6% variance in IKDB can be predicted by independent variables of model 3. P value for this model is 0.000 which is less than .05 thus shows the statistical significance of the model. Table 5-12c (Appendix F) shows the individual effect of each predictor of model 3 on IKDB. Des_Mal_Aut, Task_Var, Task_Sig and Feedbck_Job are statistically significant variables in this model as their p values are less than .05. Other variables Work_Sch_Aut, Work_Method_Aut, Task_Identity, inter_peou_pu_wsa and inter_peou_pu_dma are statistically not significant because of their p values which are higher than 0.05.

Moderating effects of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy and IKDB are shown in model 4 which is presented in Table 5-12d (Appendix F). In addition, this model also analyzes the relationship between task characteristics as independent variables and IKDB as dependent variable. Results for regression analysis for this model are shown in table 5-12. Value of R = 0.840, R square = 0.705 and adjusted R square = 0.697. This shows that 69.7% variance in IKDB can be predicted by independent variables of model 4. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Table 5-12d (Appendix F) shows the individual effect of each variable on IKDB. Task_Var (p = 0.020<.05), Task_Sig (p = 0.006<.05) and Feedbck_Job (p = 0.035<.05) are statistically significant predictors in this model based on their p value. Predictors that are statistically not significant are Work_Sch_Aut (p = 0.484>.05), Des_Mal_Aut (p = 0.189>.05), Work_Method_Aut (p = 0.584>.05), Task_Identity (p = 0.126>.05), inter_peou_pu_wsa (p = 0.213>.05), inter_peou_pu_dma (p = 0.965>.05) and inter_peou_pu_wma (p = 0.176>.05).

Model 5 is presented in table 5-12e (Appendix F) which is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, Task variety and IKDB. This model also incorporates the relationship between task characteristics and IKDB. Value of R for this model = 0.840, R square = 0.706 and adjusted R square = 0.697. This shows that 69.7% variance in IKDB can be predicted by the independent variables in model 5. Value of p for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Individual effect of each independent variable and moderation on IKDB can be seen in table 5-12e (Appendix F). Task_Sig and Feedbck_Job are the only two statistically significant variables based on their p values in this model when tested with other predictors. All other variables are statistically not significant because their p values are higher than 0.05.

Table 5-12f (Appendix F) presents model 6 from table 5-12. This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and IKDB. Other relationships in this model include between task characteristics and IKDB. Results for regression for this model are shown in table 5-12. Value of R model 6 is 0.842, R square = 0.709 and adjusted R square = 0.699. This shows that 69.9% variance in IKDB can be predicted by independent variables of model 6. p value is 0.000 which is less than 0.05 thus shows that this model is statistically significant. Individual effect of each predictor of model 6 on IKDB is shown in table 5-12f (Appendix F). Task_Sig (p = 0.003<.05) and Feedbck_Job (p = 0.031<.05) are the only two variables which are statistically significant in this model based on their p values. All other variables are statistically not significant.

Table 5-12 shows the hierarchical multiple regression results for model 7 which is about the moderating effect of PEOU and PU on the relationships between all task characteristics (except feedback from job) and IKDB. This model also incorporates the relationships between task characteristics and IKDB. This model is presented in table 5-12g (Appendix F). Value of R for this model from table 5-12 is 0.842, R square = 0.709 and adjusted R square = 0.698. This adjusted R square value shows that 69.8% variance in IKDB can be predicted by the predictors of model 7. Value of p for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model.

Individual effect of each variable on IKDB in model 7 is shown in table 5-12g (Appendix F). Task_Sig (p = 0.010<.05) and Feedbck_Job (p = 0.030<.05) are the variables which are statistically significant because of their p values which are less than .05. Statistically non-significant variables are Work_Sch_Aut, des_Mal_Aut, Work_Method_Aut, Task_Var, Task_Identity, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts and inter_peou_pu_ti.

Model 8 from table 5-12 is presented in table 5-12h (Appendix F). This model is about the relationships between task characteristics and IKDB. Besides, moderating effect of PEOU and PU on the relationships between task characteristics and IKDB are also analyzed in this model. Value of R for this model is 0.843, R square is 0.711 and adjusted R square is 0.700. This adjusted R square value shows that 70% variance in IKDB can be predicted by the independent variables of model 8. P value for model 8 is 0.000<.05 thus shows the statistical significance of the model. Table 5-12h (Appendix F) shows the individual effect of each predictor on IKDB. The only predictor which is statistically significant in this model is Task_Sig (p = 0.005<.05). All other variables are statistically not significant because of their p value which are higher than 0.05.

## 5.13 Relationship between Task Characteristics, PEOU, PU and IKCB

**Predictors**

- Work Schedule Autonomy
- Decision making Autonomy
- Work Method Autonomy
- Task variety
- Task Significance
- Task Identity
- Feedback from Job

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-12: Components of Models 1-8 between task characteristics, PEOU, PU and IKCB

Figure 5-12 presents the components of models 1-8 from table 5-13. These models show the relationships between task characteristics (independent variables), PEOU and PU (moderating variables) and IKCB (dependent variable) through hierarchical multiple regression analysis.

Model 1 is about the effect of independent variable (task characteristics) and dependent variable (IKCB). Regression results for this model are shown in table 5-13. Value of R for model 1 is 0.840, R square = 0.705 and adjusted R square = 0.699. These values show that 69.9% variance in IKCB can be predicted by the independent variables of model 1. P value for this model is 0.000 which is less than .05 thus this p value shows the statistical significance of the model.

Table 5-13: Models between Task Characteristics, PEOU, PU and IKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .840[a] | 0.705 | 0.699 | 0.563 | 0.705 | 121.506 | 9 | 356 | 0.000 | 0.000 |
| 2 | .840[b] | 0.706 | 0.699 | 0.563 | 0.001 | 1.103 | 1 | 355 | 0.294 | 0.000 |
| 3 | .841[c] | 0.707 | 0.700 | 0.562 | 0.002 | 1.883 | 1 | 354 | 0.171 | 0.000 |
| 4 | .842[d] | 0.709 | 0.701 | 0.561 | 0.002 | 2.127 | 1 | 353 | 0.146 | 0.000 |
| 5 | .842[e] | 0.710 | 0.701 | 0.562 | 0.000 | 0.566 | 1 | 352 | 0.453 | 0.000 |
| 6 | .844[f] | 0.713 | 0.703 | 0.560 | 0.003 | 3.723 | 1 | 351 | 0.054 | 0.000 |
| 7 | .844[g] | 0.713 | 0.703 | 0.560 | 0.000 | 0.591 | 1 | 350 | 0.443 | 0.000 |
| 8 | .845[h] | 0.713 | 0.702 | 0.560 | 0.000 | 0.350 | 1 | 349 | 0.555 | 0.000 |
| a. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv | | | | | | | | | | |
| f. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts | | | | | | | | | | |
| g. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti | | | | | | | | | | |
| h. Predictors: (Constant), Feedbck_Job, Work_Sch_Aut, Work_Method_Aut, Task_Identity, Des_Mal_Aut, Task_Var, Task_Sig, peou, pu, inter_peou_pu_wsa, inter_peou_pu_dma, inter_peou_pu_wma, inter_peou_pu_tv, inter_peou_pu_ts, inter_peou_pu_ti, inter_peou_pu_fj | | | | | | | | | | |

Results for the individual effect of each independent variable of model 1 on IKCB are shown in table 5-13a (Appendix F). This model (model 1) is also presented in table 5-13a (Appendix F). Based on the p value of each predictor, Des_Mal_Aut (p = 0.002<.05), Task_Var (p = 0.000<.05), Task_Sig (p = 0.016<.05) and Task_Identity (p = 0.015<.05) are statistically significant variables in model 1. These variables are statistically significant because their p values are lower than 0.05 significance level. Similarly, based on p value, statistically not significant variables are Work_Sch_Aut (p = 0.865>.05), Work_Method_Aut (p = 0.109>.05) and Feedbck_Job (p = 0.244>.05).

Table 5-13b (Appendix F) presents model 2 from table 5-13 which is about the moderating effect of PEOU and PU on the relationship between work schedule autonomy and IKCB. Other relationships in this model are between task characteristics and IKCB. Regression results for this model are shown in table 5-13. Value of R for this model is 0.840, R square = 0.706 and adjusted R square = 0.699. These values show that variables are highly correlated and 69.9% variance in IKCB can be predicted by the predictors of model 2. Statistical significance of the model can be observed from the p value which is 0.000<.05 thus shows that model is statistically significant. Table 5-13b (Appendix F) shows the individual effect of each predictor of model 2 on IKCB. Des_Mal_Aut, Task_Var, Task_Sig and Task_Identity are the variables which are statistically significant because of their p values because they are lower than 0.05. Variables which are statistically not significant are Work_Sch_Aut, Work_Method_Aut, Feedbck_Job and inter_peou_pu_wsa. Statistical insignificance of these variables is based on their p values which are higher than 0.05.

Model 3 from table 5-13 is presented in table 5-13. This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy and IKCB. Besides, this model also analyzes the relationships between task characteristics and IKCB. Value of R for this model is 0.841, R square = 0.707 and adjusted R square = 0.700 which shows that 70% variance in IKCB can be predicted because of predictors of model 3. P value for this model is 0.000<.05 which shows that model is statistically significant. Table 5-13c (Appendix F) shows the individual effect of each predictor of model 3 on IKCB. Based on p value, Des_Mal_Aut, Task_Var, Task_Sig and Task_Identity are statistically significant predictors because their p values are 0.004, 0.000, 0.012 and 0.017 respectively. All these p values are lower than significance level (p<.05) therefor these variables are statistically significant. Other variables which include Work_Sch_Aut, Work_Method_Aut, Feedbck_Job, inter_peou_pu_wsa and inter_peou_pu_dma have p values 0.312, 0.073, 0.231, 0.222 and 0.171 respectively. These p values are higher than 0.05 level therefore these predictors are statistically not significant because of these values.

Moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy work method autonomy and IKCB are shown in model 4 which is presented in table 5-13d (Appendix F). This model also analyzes the relationship between task characteristics and IKCB. Results for hierarchical multiple regression tests are shown in table 5-13. Based on these analysis, value of R = 0.842, R square = 0.709 and adjusted R square = 0.701. This adjusted R square value shows that 70.1% variance in IKCB can be predicted by the independent variables of model 4. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Individual effect of each predictor of model 4 on IKCB is shown in table 5-13d (Appendix F). Task_Var (p = 0.000<.05), Task_Sig (p = 0.016<.05) and Task_Idntity (p = 0.011<.05) are statistically significant predictors in this model because of their p value which are lower than 0.05 significance level. Statistically non-significant variables are Work_Sch_Aut (p = 0.203>.05), Des_Mal_Aut (p = 0.139>.05), Work_Method_Aut (p = 0.699>.05), Feedbck_Job (p = 0.307>.05), inter_peou_pu_wsa (p = 0.122>.05), inter_peou_pu_dma (p = 916>.05) and inter_peou_pu_wma (p = 0.146>.05). All these variables are statistically not significant because their p values are higher than 0.05.

Model 5 from table 5-13 is presented in table 5-13e (Appendix F). This model is about the relationships between task characteristics and IKCB as independent and dependent variables respectively. Besides, this model analyzes the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety and IKCB. Results for hierarchical multiple regression are shown in table 5-13. Value of R for this model is 0.842, R square = 0.710 and adjusted R square = 0.701. This shows that 70.1% variance in IKCB can be predicted by independent variables of model 5. P = 0.000<.05 for this model which shows its statistical significance. Effect of each variable individually on IKCB is shown in table 5-13e (Appendix F). Task_Var, Task_Sig and Task_Identity are statistically significant predictors in this model. All other predictors are statistically not significant based on their p values which are higher than 0.05 significance level.

Table 5-13f (Appendix F) presents model 6 from table 5-13. This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance and IKCB. Besides, this model also analyzes the relationship between task characteristics and IKCB. Value of R for this model is 0.844, R square = 0.713 and adjusted R square = 0.703. This adjusted R square value shows that 70.3% variance in IKCB can be observed by predictors of model 6. P value for this model is 0.000<.05 thus shows the statistical significance of the model. Table 5-13f (Appendix F) shows the individual effect of each predictor of model 6 on IKCB. Task_Sig (p = 0.004<.05) and Task_Identity (p = 0.012<.05) are the only two predictors of model 6 which are statistically significant based on their p values. All other variables are statistically not significant because of their p values which are higher than 0.05.

Model 7 from table 5-13 is presented in table 5-13g (Appendix F). This model is about the moderating effect of PEOU and PU on the relationships between work schedule autonomy, decision making autonomy, work method autonomy, task variety, task significance, task identity and IKCB. Model 7 also analyzes the relationships between task characteristics and IKCB. Table 5-13 shows the hierarchical multiple regression for this model. Value of R = 0.844, R square = 0.713 and adjusted R square = 0.703. This shows that 70.3% variance in IKCB can be predicted by the predictors of this model. Value of p = 0.000<.05 which shows that model 7 is statistically significant. Task_Sig (p = 0.019<.05) is the only predictor in this model which is statistically significant based on its p value which is less than 0.05. All other remaining predictors of this model are statistically not significant because they do not meet the criteria of p<.0.5.

Table 5-13h (Appendix F) presents model 8 from table 5-13. This model analyzes the moderating effect of PEOU and PU on the relationships between all task characteristics and IKCB. In addition, this model also has analyzes the relationship of task characteristics (independent variables) and IKCB (dependent variables). Regression results for this model are shown in table 5-13. R value for this model is 0.845, R square = 0.713 and adjusted R square = 0.702. This value of adjusted R square shows that 70.2% variance in IKCB can be observed by the predictors of model 8. For model 8, p = 0.000<.05 thus showing that model is statistically significant. Individual effect of each predictor of model 8 on IKCB is shown in table 5-13h (Appendix F). Only variable that is statistically significant based on the p value is Task_Sig (p = 0.016<.05). All other predictors of this model are statistically not significant because of their p values.

## PART II - Knowledge Characteristics and KSB

### 5.14 Relationship between Knowledge Characteristics, PEOU and EKDB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-13: Components of Models 1-6 between knowledge characteristics, PEOU and EKDB

Figure 5-13 presents the components of models 1-6 from table 5-14. These models contain knowledge characteristics (dependent variable), PEOU (moderating variable) and EKDB (dependent variable). Results for hierarchical multiple regression analysis for models 1-6 are shown in table 5-14.

Model 1 from table 5-14 is about the relationship between knowledge characteristics and EKDB. This model is presented in table 5-14a (Appendix G). Value of R for this model is 0.851, R square = 0.724 and adjusted R square = 0.721 which shows that 72.1% variance in EKDB can be predicted by the independent variables of model 1. P = 0.000<.05 thus shows that model 1 is statistically significant.

Table 5-14: Models between Knowledge Characteristics, PEOU and EKDB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.724 | 0.721 | 0.541 | 0.724 | 188.159 | 6 | 358 | 0.000 | 0.000 |
| 2 | .853[b] | 0.727 | 0.723 | 0.539 | 0.003 | 3.589 | 1 | 357 | 0.059 | 0.000 |
| 3 | .855[c] | 0.731 | 0.726 | 0.536 | 0.004 | 5.397 | 1 | 356 | 0.021 | 0.000 |
| 4 | .855[d] | 0.731 | 0.725 | 0.537 | 0.000 | 0.001 | 1 | 355 | 0.971 | 0.000 |
| 5 | .855[e] | 0.731 | 0.724 | 0.537 | 0.000 | 0.052 | 1 | 354 | 0.819 | 0.000 |
| 6 | .856[f] | 0.732 | 0.724 | 0.537 | 0.001 | 1.023 | 1 | 353 | 0.313 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv, inter_peou_spec

Individual effect of each predictor of model 1 on EKDB is shown in table 5-14a (Appendix G). Prob_Sol (p = 0.001<.05), Skill_Variety (p = 0.000<.05) and Specialization (p = 0.005<.05) are the predictors which are statistically significance because of their p values which are lower than 0.05. Statistically non-significant variables are Job_Complexity (p = 0.810>.05) and Info_Proc (p = 0.264>.05).

Model 2 from table 5-14 is presented in table 5-14b (Appendix G). This model is about the moderating effect of PEOU on the relationship between job complexity and EKDB. Beside, this model also analyzes the relationships between knowledge characteristics and EKDB. Regression results for this model are shown in table 5-14. Value of R = 0.853, R square = 0.727 and adjusted R square = 0.723. This adjusted R square shows that 72.3% variance in EKDB can be predicted by the predictors of model 2. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Individual effect of each variables and contribution to the model are shown in table 5-14b (Appendix G). P values for Prob_Sol, Skill_Variety and Specialization are 0.001, 0.000 and 0.008 respectively.

These p values are less than 0.05 which shows the statistical significance of these predictors. P values for statistically non-significant variables Job_Complexity, Info_Proc and inter_peou_jc are 0.095, 0.211 and 0.059 respectively. All these p values are higher than 0.05 thus these variables are considered to be statistically not significant.

Table 5-14c (Appendix G) presents model 3 from table 5-14 which is about the moderating effect of PEOU on the relationships between job complexity, information processing and EKDB. Additionally, this model also shows and analyzes the relationships between knowledge characteristics and EKDB. Results for hierarchical multiple regression are shown in table 5-14. R value for this model is 0.855, R square = 0.731 and adjusted R square = 0.726. These values show that variables are highly correlated and 72.6% variance in EKDB can be predicted by predictors of model 3. P value for this model is 0.000 which fulfills the criteria ($p<.05$) of being statistically significant. Table 5-14c (Appendix G) shows the individual effect of each predictor of model 3 on EKDB. Based on p value and criteria of p should be less than 0.05, Infor_Proc ($p = 0.040$), Prob_Sol ($p = 0.004$), Skill_Variety ($p = 0.000$), Specialization ($p = 0.009$) and inter_peou_ip ($p = 0.021$) are statistically significant variables. However, Job_Complexity ($p = 0.799$) and inter_peou_jc ($p = 0.596$) are statistically not significant because they do not meet the criteria of p should be less than 0.05.

Model 4 is about the moderating effect of PEOU on the relationships between job complexity, information processing, problem solving and EKDB. Besides, this model also analyzes the relationships between knowledge characteristics and EKDB. Results for regression analysis for this model are shown in table 5-14. R value = 0.855, R square = 0.731 and adjusted R square = 0.725 which means that 72.5% variance in EKDB can be observed by the predictors of this model. P value for this model is 0.000<.05 thus shows that model 4 is statistically significant. Table 5-14d (Appendix G) presents the individual effect of each variable on EKDB. Skill_Variety ($p = 0.000$) and Specialization ($p = 0.009$) are the only two variables which are statistically significant in this model because of their p values which are less than 0.05. All other variables are statistically not significant.

Table 5-14e (Appendix G) presents model 5 which is about the moderating effect of PEOU on the relationships between job complexity, information processing, problem solving, skill variety and EKDB in addition to analyzing the relationships between all knowledge characteristics and EKDB. Table 5-14 shows the results of regression analysis for this model. Value of R = 0.855, R square = 0.731 and adjusted R square = 0.724. This shows that 72.4% variance in EKDB can be observed by predictors of model 5. P value for this model is 0.000<.05 thus showing that model is statistically significant. Individual effect of each variable on EKDB and contribution to the model are shown in table 5-14e (Appendix G). Specialization is the only variable which is statistically significant to this model as compare to all other variables which are statistically not significant based on their p values.

Moderating effect of PEOU on the relationships between all knowledge characteristics and EKDB are shown in model 5 and presented through table 5-14f (Appendix G). Value of R for this model is 0.856, R square = 0.732 and adjusted R square = 0.724 which shows that 72.4% variance in EKDB can be observed based on the predictors of model 6. P value for this model is 0.000 which is less than 0.05 thus emphasizes that this model is statistically significant. Table 5-14f (Appendix G) shows the individual effect of each variable of model 6 on EKDB. Based on p value, none of the predictors of model 6 is statistically significant when tested in this model. p value for every variable is higher than 0.05.

## 5.15 Relationship between Knowledge Characteristics, PEOU and EKCB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-14: Components of Models 1-6 between knowledge characteristics, PEOU and EKCB

Components of models 1-6 are presented in figure 5-14. These models are about the relationships between knowledge characteristics as dependent variables, PEOU as moderating variables and EKCB as dependent variable. Results for hierarchical multiple regression analysis are shown in table 5-15.

Model 1 is about the relationships between knowledge characteristics and EKCB. Value of R for this model is 0.851, R square is 0.724 and adjusted R square = 0.721 which shows that 72.1% variance in EKCB can be observed because of the predictors of model 1. Value of p for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model.

Table 5-15: Models between Knowledge Characteristics, PEOU and EKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.724 | 0.721 | 0.543 | 0.724 | 188.175 | 6 | 358 | 0.000 | 0.000 |
| 2 | .853[b] | 0.728 | 0.723 | 0.540 | 0.003 | 4.588 | 1 | 357 | 0.033 | 0.000 |
| 3 | .856[c] | 0.733 | 0.727 | 0.536 | 0.005 | 6.163 | 1 | 356 | 0.014 | 0.000 |
| 4 | .856[d] | 0.733 | 0.727 | 0.536 | 0.000 | 0.501 | 1 | 355 | 0.480 | 0.000 |
| 5 | .856[e] | 0.733 | 0.726 | 0.537 | 0.000 | 0.194 | 1 | 354 | 0.660 | 0.000 |
| 6 | .856[f] | 0.733 | 0.726 | 0.538 | 0.000 | 0.258 | 1 | 353 | 0.612 | 0.000 |
| a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou | | | | | | | | | | |
| b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc | | | | | | | | | | |
| c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip | | | | | | | | | | |
| d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps | | | | | | | | | | |
| e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv | | | | | | | | | | |
| f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv, inter_peou_spec | | | | | | | | | | |

Individual effect of each variable and contribution to the model 1 are shown in table 5-15a (Appendix G). Skill_Variety (p = 0.000<.05) and Specialization (p = 0.001<.05) are the two predictors of this model which are statistically significant. Other variables namely Job_Complexity (p = 0.490>.05), Info_Proc (p = 0.277>.05) and Prob_Sol (p = 0.054>.05) are statistically not significant. Statistical significance and insignificance of these variables is based on p value criteria (p<.05).

Table 5-15b (Appendix G) presents model 2 from table 5-15 which is about the moderating effect of PEOU on the relationship between job complexity and EKCB in addition to the relationships between knowledge characteristics and EKCB. Results for regression analysis are shown in table 5-15. Based on regression analysis, R value for this model is 0.853, R square = 0.728 and adjusted R square = 0.723. This adjusted R square value shows that 72.3% variance in EKCB can be predicted by predictors of model 2. P value for this model is 0.000<.05 thus showing that this model is statistically significant. Table 5-15b (Appendix G) presents the individual effect of each variable on EKCB. Job_Complexity (p = 0.033<.05), Prob_Sol (p = 0.044<.05), Skill_Variety (p = 0.000<.05), Specialization (p = 0.001<.05) and inter_peou_jc (p = 0.033<.05) are statistically significant predictors of this model. The only statistically non-significant predictor is Info_Proc (p = 0.215>.05).

Model 3 is about the moderating effect of PEOU on the relationships between job complexity, information processing and EKCB besides analyzing the relationships between knowledge characteristics and EKCB. This model is presented in table 5-15c (Appendix G) and results of hierarchical multiple regression for this model are shown in table 5-15. R value = 0.856, R square = 0.733 and adjusted R square = 0.727 which means that 72.7% variance in EKCB can be observed because of the predictors of model 3. Value of p for this model is 0.000 which is less than 0.05 thus shows that this model is statistically significant. Individual effect of each variable on EKCB is shown in table 5-15c (Appendix G). Info_Proc (p = 0.036), Skill_Variety (p = 0.000), Specialization (p = 0.001) and inter_peou_ip (p = 0.014) are statistically significant as their p values are less than 0.05. Job_Complexity (p = 0.564), Prob_Sol (p = 0.103) and inter_peou_jc (p = 0.625) are statistically not significant because of p values which are higher than 0.05.

Table 5-15d (Appendix G) is about the relationships between knowledge characteristics and EKCB. Besides, this model is also about the moderating effect of PEOU on the relationships between job complexity, information processing, problem solving and EKCB. Results for hierarchical multiple regression are shown in table 5-15. Value of R for this model is 0.856, R square = 0.733 and adjusted R square = 0.727 which shows that 72.7% variance in EKCB can be observed by the predictors of model 4. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Table 5-15d (Appendix G) shows the individual effect of each variable on EKCB. Skill_Variety (p = 0.000) and Specialization (p = 0.001) are the two variables in this model which are statistically significant based on their p values which are less than 0.05. All other variables have p value more than 0.05 therefore are statistically not significant.

Relationships between knowledge characteristics and EKCB are shown in model 5 which is presented in figure 5-14. In addition, this model also analyzes the moderating effect of PEOU on the relationships between job complexity, information processing, problem solving, skill variety and EKCB. Table 5-15 shows the results for regression for this model. R = 0.856, R square = 0.733 and adjusted R square = 0.726 which shows that 72.6% variance in EKCB can be predicted by the predictors of model 5. Value of p for this model is 0.000 which is less than 0.05 thus shows that this model is statistically significant. Table 5-15e (Appendix G) presents the results for the individual effect of each predictor on EKCB. Based on p value, Specialization is the only predictor which has statistically significance in this model because p = 0.001<.05 for this model. P values for Job_Complexity, Info_Proc, prob_Sol, Skill_Variety, inter_peou_jc, inter_peou_ip, inter_peou_ps and inter_peou_ps are 0.534, 0.694, 0.209, 0.235, 0.588, 0.938 and 0.418 respectively. All these p values are higher than 0.05 therefore these variables are statistically not significant.

Model 6 from table 5-15 is presented in table 5-15f (Appendix G). This model is about the moderating effect of PEOU on the relationships between knowledge characteristics and EKCB besides the impact of knowledge characteristics on EKCB. Regression results for this model are shown in table 5-15. Value of R for this model is 0.856, R square = 0.733 and adjusted R square = 0.726. This shows that 72.6% variance in EKCB can be predicted by independent variables of model 6. P = 0.000<.05 for model 6 therefore this model is statistically significant. Results for the individual effect of each predictor of model 6 on EKCB is shown in table 5-15f (Appendix G). P value for every predictor in this model is greater than 0.05 therefore all of them are statistically not significant as far as this model is concerned.

## 5.16 Relationship between Knowledge Characteristics, PEOU and IKDB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-15: Components of Models 1-6 between knowledge characteristics, PEOU and IKDB

Figure 5-15 presents components of models 1-6 from table 5-16. These models are based on knowledge characteristics (independent variable), POU (moderating variable) and IKDB (dependent variable). Results for hierarchical multiple regression for these models are shown in table 5-16.

Model 1 from table 5-16 is about the impact of knowledge characteristics on IKDB as independent variable. Value of R for this model is 0.845, R square is 0.714 and adjusted R square is 0.710 which shows that 71% variance in IKDB can be predicted by independent variables of model 1. P value for this model is 0.000 which is less than 0.05; this shows the statistical significance of the model.

Table 5-16: Models between Knowledge Characteristics, PEOU and IKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. Error of the Estimate | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .845[a] | 0.714 | 0.710 | 0.559 | 0.714 | 179.014 | 6 | 358 | 0.000 | 0.000 |
| 2 | .847[b] | 0.718 | 0.713 | 0.557 | 0.003 | 4.264 | 1 | 357 | 0.040 | 0.000 |
| 3 | .851[c] | 0.724 | 0.718 | 0.552 | 0.006 | 8.031 | 1 | 356 | 0.005 | 0.000 |
| 4 | .851[d] | 0.724 | 0.718 | 0.552 | 0.000 | 0.277 | 1 | 355 | 0.599 | 0.000 |
| 5 | .851[e] | 0.724 | 0.717 | 0.553 | 0.000 | 0.003 | 1 | 354 | 0.959 | 0.000 |
| 6 | .851[f] | 0.724 | 0.716 | 0.554 | 0.000 | 0.013 | 1 | 353 | 0.908 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv, inter_peou_spec

Table 5-16a (Appendix G) shows the individual effect of each predictor of model 1 on IKDB. Prob_Sol (p = 0.009<.05), Skill_Variety (p = 0.000<.05) and Specialization (p = 0.001<.05) are the predictors in this model which have statistical significance based on their p values. Job_Complexity (p = 0.676>.05) and Info_Proc (p = 0.684>.05) are statistically not significant variables.

Model 2 from table 5-16 is presented in table 5-16b (Appendix G). This model not only analyzes the relationship between knowledge characteristics and IKDB but also moderating effect of PEOU on the relationship between job complexity and IKDB. Regression results for this model are shown in table 5-16. R = 0.847, R square = 0.718 and adjusted R square = 0.713. This shows that 71.3% variance in IKDB can be observed by the independent variables of model 2. P = 0.000<.05 which shows that this model is statistically significant as well. Individual effect of each variable on IKDB is shown in table 5-16b (Appendix G). Prob_Sol (p = 0.007<.05), Skill_Variety (p = 0.000<.05), Specialization (p = 0.001<.05) and inter_peou_jc (p = 0.040<.05) are the predictors of model 2 which have statistical significance whereas Job_Complexity (p = 0.155>.05) and Info_Proc (p = 0.580>.05) are statistically not significant.

Table 5-16c (Appendix G) presents model 3 from table 5-16. This model is about the moderating effect of PEOU on the relationships between job complexity, information processing and IKDB. Besides, this model analyzes the effect of knowledge characteristics and IKDB. Table 5-16 shows the regression results for this model. Value of R = 0.851, R square = 0.724 and adjusted R square = 0.718 which shows that 71.8% variance in IKDB can be predicted by the predictors of model 3. P = 0.000<.05 for this model which shows that model 3 is statistically significant. Table 5-16c (Appendix G) presents individual effect of predictors of this model on IKDB. Prob_Sol (p = 0.024), Skill_Variety (p = 0.000), Specialization (p = 0.001) and inter_peou_ip (p = 0.005) are statistically significant predictors because their p values are lower than 0.05 level. Job_Complexity (p = 0.828), Info_Proc (p = 0.109) and inter_peou_jc (p = 0.422) are statistically not significant as their p values are higher than 0.05 significance level.

Model 4 which is about the moderating effect of PEOU on the relationships between job complexity, information processing, problem solving and IKDB is presented through table 5-16d (Appendix G). Moreover, this model also analyzes the effect of knowledge characteristics as independent variable on IKDB as dependent variable. Value of R for this model = 0.851, R square = 0.724 and adjusted R square = 0.718. This adjusted R square values show that 71.8% change in IKDB can be predicted by the predictors of model 4. P = 0.000<.05 for this model which shows that the model is statistically significant. Table 5-16d (Appendix G) presents the results for the individual effect of each variable on IKDB. Based on p value (p<.05), Skill_Variety (p = 0.000) and Specialization (p = 0.001) are the only predictors with statistical significance.  All other variables are statistically not significant because p>.05 for them.

Table 5-16e (Appendix G) presents model 5 from table 5-16. This model shows the moderating effect of PEOU on the relationships between job complexity, information processing, problem solving, skill variety and IKDB. Also, this model analyzes the independent effect of knowledge characteristics on IKDB (dependent variable). Results for hierarchical multiple regression are shown in table 5-16. R for this model = 0.851, R square = 0.724 and adjusted R square = 0.717 which shows that 71.7% variance in IKDB can be observed by predictors of model 5. P = 0.000<.05 for this model which shows that model is statistically significant. Individual effect of each predictor of model 5 on IKDB is shown in table 5-16e (Appendix G). These results show that Specialization (p = 0.001<.05) is the only statistically significant variable and all other predictors are statistically not significant.

Table 5-16f (Appendix G) presents model 6 which is about the moderating effect of PEOU on the relationships between knowledge characteristics and IKDB. This model also analyzes the effect of independent variable (knowledge characteristics) on dependent variable (IKDB). Table 5-16 shows the results for hierarchical multiple regression analysis for this model. Based on regression analysis, R = 0.851, R square = 0.724 and adjusted R square = 0.716 which shows that 71.6% variance in IKDB can be predicted by predictors of model 6. P value for this model is 0.000 which is less than 0.05 thus showing that model 6 is statistically significant. Table 5-16f (Appendix G) shows the results for the individual effect of each predictor on IKDB. Based on p value, all the variables are statistically not significant because p value for every predictor is higher than 0.05.

### 5.17 Relationship between Knowledge Characteristics, PEOU and IKCB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-16: Components of Models 1-6 between knowledge characteristics, PEOU and IKCB

Components of models 1-6 are presented in figure 5-16. These modes are between knowledge characteristics, PEOU and IKCB as independent, moderating and dependent variables. Table 5-17 shows the results for hierarchical multiple regression analysis for these models.

Table 5-17: Models between Knowledge Characteristics, PEOU and IKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .849[a] | 0.720 | 0.717 | 0.546 | 0.720 | 184.554 | 6 | 358 | 0.000 | 0.000 |
| 2 | .851[b] | 0.725 | 0.720 | 0.543 | 0.004 | 5.609 | 1 | 357 | 0.018 | 0.000 |
| 3 | .856[c] | 0.732 | 0.727 | 0.536 | 0.007 | 9.918 | 1 | 356 | 0.002 | 0.000 |
| 4 | .856[d] | 0.733 | 0.727 | 0.536 | 0.001 | 1.033 | 1 | 355 | 0.310 | 0.000 |
| 5 | .856[e] | 0.733 | 0.727 | 0.537 | 0.000 | 0.432 | 1 | 354 | 0.511 | 0.000 |
| 6 | .856[f] | 0.733 | 0.726 | 0.537 | 0.000 | 0.102 | 1 | 353 | 0.750 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, inter_peou_jc, inter_peou_ip, inter_peou_ps, inter_peou_sv, inter_peou_spec

Model 1 is presented in table 5-17. This model is about the effects of knowledge characteristics on IKCB. Value of R for this model is 0.849, R square = 0.720 and adjusted R square = 0.717 which shows that 71.7% change in IKCB can be observed because of predictors of model 1. P = 0.000<.05 for this model which shows that model 1 is statistically significant. Individual effect of each variable on IKCB in model 1 is shown in table 5-17a (Appendix G). Info_Proc (p = 0.041<.05), Prob_Sol (p = 0.039<.05), Skill_Variety (p = 0.000<.05) and Specialization (p = 0.007<.05) are statistically significant predictors in this model whereas Job_Complexity (p = 0.711>.05) is statistically not significant.

Table 5-17b (Appendix G) shows the moderating effect of PEOU on the relationship between job complexity and IKCB. In addition, this model also analyzes the relationships between knowledge characteristics and IKCB. Regression results for model 2 are shown in table 5-17. Value of R for this model is 0.851, R square = 0.725 and adjusted R square = 0.720 which means that 72% variance in IKCB can be observed by predictors of model 2. P = 0.000<.05 for this model which shows the statistical significance of the model. Individual effect of each variable of model 2 on IKCB is shown in table 5-17b (Appendix G). Info_Proc (p = 0.027<.05), Prob_Sol (p = 0.030<.05), Skill_Variety (p = 0.000<.05), Specialization (p = 0.009<.05) and inter_peou_jc (p = 0.018<.05) are statistically significant predictors based on their p value. The only predictor which is statistically not significant in this model is Job_Complexity (p = 0.090>.05).

Model 3 analyzes the moderating effect of PEOU on the relationships between job complexity, information processing and IKCB. This model also analyzes the relationships between knowledge characteristics and IKCB. Results for these analysis are shown in table 5-17. R value for this model is 0.856, R square is 0.732 and adjusted R square is 0.727 which shows that 72.7% variance in IKCB can be observed by predictors of model 3. P value for this is 0.000<.05 thus showing that model 3 is statistically significant. Table 5-17c (Appendix G) shows the individual effect of all predictors of model 3 on IKCB. Info_Proc (p = 0.001<.05), Skill_Variety (p = 0.000<.05), Specialization (p = 0.010<.05) and inter_peou_ip (p = 0.002<.05) are all statistically significant because of their p values which are less than 0.05. Job_Complexity (p = 0.889>.05), Prob_Sol (p = 0.091>.05) and inter_peou_jc (p = 0.401>.05) are statistically not significant variables in model 3 because of p>.05.

Moderating effect of PEOU on the relationships between job complexity, information processing, problem solving and IKCB are presented through table 5-17d (Appendix G). This table also shows the relationships between knowledge characteristics and IKCB. Results for regression analysis for this model (model 4) are shown in table 5-17. Value of R = 0.856, R square = 0.733 and adjusted R square = 0.727 which means that 72.7% variance in IKCB can be observed because of predictors of model 4. P = 0.000<.05 for this model which shows that model is statistically significant. Table 5-17d (Appendix G) shows the individual effect of each predictor of model 4 on IKCB. Skill_Variety (p = 0.000<.05) and Specialization (p =

0.009<.05) are the two predictors with statistical significance in this model. All other variables are statistically not significant because their p values are higher than 0.05.

Model 5 from table 5-17 is about the relationships between knowledge characteristics and IKCB besides the moderating effect of PEOU on the relationships between job complexity, information processing, problem solving, skill variety and IKCB. This model is presented through table 5-17e (Appendix G). Results for regression analysis are shown in table 5-17. Value of R for this model is 0.856, R square = 0.733 and adjusted R square = 0.727 which shows that 72.7% variance in IKCB can be predicted by predictors of this model. P = 0.000<.05 for model 5 which means that this model is statistically significant. Individual effect of each predictor of model 5 on IKCB is shown in table 5-17e (Appendix G). Specialization is the only variable which has statistically significant contribution to the model based on p value (p = 0.010<.05). P values for Job_Complexity, Info_Proc, Pro_Sol, Skill_Variety, inter_peou_jc, inter_peou_ip, inter_poeu_ps and inter_peou_sv are 0.789, 0.970, 0.227, 0.053, 0.268, 0.396, 0.453 and 0.511 respectively. All these p values are higher than 0.05 thus showing that all of them are statistically not significant.

Table 5-17f (Appendix G) presents model 6 from table 5-17 which is about the relationship between knowledge characteristics and IKCB. This model also analyzes the moderating effect of PEOU on all the relationships between knowledge characteristics and IKCB. Results for hierarchical multiple regression analysis for this model are shown in table 5-17. R = 0.856, R square = 0.733 and adjusted R square = 0.726. This adjusted R square shows that 72.6% variance in IKCB can be observed by the predictors of model 6. P value for this model is 0.000 which is less than 0.05 thus shows that model is statistically significant. Table 5-17f (Appendix G) shows the individual effect of each independent variable on IKCB. Based on p value, all of the predictors are statistically not significant as their p values are more than 0.05 statistical significance level.

### 5.18 Relationship between Knowledge Characteristics, PU and EKDB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-17: Components of Models 1-6 between knowledge characteristics, PU and EKDB

Figure 5-17 shows the components of models 1-6. These models are based on the relationships between knowledge characteristics (dependent variable), PU (moderating variable) and EKDB (dependent variable). Table 5-18 shows hierarchical multiple regression analysis for these models.

Model 1 is about the effect of independent variable (knowledge characteristics) on dependent variable (EKDB). Value of R for this model is 0.851, R square = 0.724 and adjusted R square is 0.721. This means that 72.1% variance in EKDB can be predicted by the predictors of model 1.

Table 5-18: Models between Knowledge Characteristics, PU and EKDB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.724 | 0.721 | 0.541 | 0.724 | 188.159 | 6 | 358 | 0.000 | 0.000 |
| 2 | .877[b] | 0.770 | 0.766 | 0.495 | 0.046 | 70.583 | 1 | 357 | 0.000 | 0.000 |
| 3 | .897[c] | 0.804 | 0.800 | 0.458 | 0.034 | 62.047 | 1 | 356 | 0.000 | 0.000 |
| 4 | .899[d] | 0.809 | 0.804 | 0.453 | 0.005 | 8.654 | 1 | 355 | 0.003 | 0.000 |
| 5 | .900[e] | 0.809 | 0.805 | 0.452 | 0.001 | 1.420 | 1 | 354 | 0.234 | 0.000 |
| 6 | .900[f] | 0.809 | 0.804 | 0.453 | 0.000 | 0.073 | 1 | 353 | 0.787 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv, inter_pu_spec

Model 1 is presented through table 5-18 whereas table 5-18a (Appendix G) shows the individual effect of each variable on EKDB in model 1. Based on p value, Prob_Sol (p = 0.001<.05), Skill_Variety (p = 0.000<.05) and Specialization (p = 0.006<.05) are statistically significant predictors in the model. Job_Complexity (p = 0.810>.05) and Info_Proc (p = 0.264>.05) are statistically not significant predictors because of their p values which are higher than 0.05.

Table 5-18b (Appendix G) presents model 2 from table 5-18. This model is about the moderating effect of PU on the relationship between job complexity and EKDB. Besides, model also analyzes the relationships between knowledge characteristics and EKDB. results for regression analysis for this model are shown in table 5-18. Value of R = 0.877, R square = 0.770 and adjusted R square = 0.766 which shows that 76.6% variance in EKDB can be predicted by the variables of model 2. P = 0.000<.05 for this model which shows that model is statistically significant. Table 5-18b (Appendix G) shows the individual effect of each predictor on EKDB. Job_Complexity (p = 0.000<.05), Prob_Sol (p = 0.034<.05), Skill_Variety (p = 0.041<.05), Specialization (p = 0.015<.05) and inter_pu_jc (p = 0.000<.05) are statistically significant predictors in this model. Statistically non-significant predictor is Info_Proc (p = 0.866>.05).

Model 3 is about the moderating effect of PU on the relationships between job complexity, information processing and EKDB. Besides, model also analyzes the relationships between knowledge characteristics and EKDB. This model is presented through table 5-18c (Appendix G). Results for regression analysis are shown in table 5-18. Value of R for this model is 0.897, R square = 0.804 and adjusted R square = 0.800 which shows that 80% variance in EKDB can be observed because of predictors of model 3. P = 0.000<.05 for this model which shows its statistical significance. Results for individual effect of each predictor of model 3 on EKDB are shown in table 5-18c (Appendix G). P value for Job_Complexity, Info_Proc, inter_pu_jc and inter_pu_ip are 0.000, 0.000, 0.000 and 0.000 respectively. All these variables are statistically significant because their p values are less than 0.05. P values for statistically not significant variables Prob_Sol, Skill_Variety and Specialization are 0.962, 0.054 and 0.056 respectively.

Table 5-18d (Appendix G) presents model 4 from table 5-18. This model is about the moderating effect of PU on the relationships between job complexity, information processing, problem solving and EKDB. This model also analyzes the relationship between knowledge characteristics and EKDB. Results for regression analysis for this model are shown in table 5-18. Value of R = 0.899, R square = 0.809 and adjusted R square = 0.804. This value shows that 80.4% change in EKDB can be observed because of predictors of model 4. P value for this model is 0.000 which is less than 0.05 thus making it a statistically significant model. Table 5-18d (Appendix G) shows the individual effect of each predictor of model 4 on EKDB. Job_Complexity (p = 0.000<.05), Prob_Sol (p = 0.005<.05), inter_pu_jc (p = 0.000<.05) and inter_pu_ps (p = 0.003<.05) are statistically significant predictors of model 4. Statistically non-significant variables are Info_Proc (p = 0.321>.05), Skill_Variety (p = 0.078>.05), Specialization (p = 0.087>.05) and inter_pu_ip (p = 290>.05).

Model 5 is about the moderating effect of PU on the relationships between job complexity, information processing, problem solving, skill variety and EKD. This model also analyzes the relationships between knowledge characteristics and EKDB.

Model 5 is presented through table 5-18e (Appendix G). Regression results for this model are shown in table 5-18. Value of R = 0.900, R square = 0.809 and adjusted R square = 0.805 which shows that 80.5% variance in EKDB can be predicted by the predictors of model 5. P = 0.000<.05 for this model which shows its statistical significance. Individual effect of each independent variable on EKDB is shown in table 5-18e (Appendix G). Job_Complexity (p = 0.000<.05), Prob_Sol (p = 0.024<.05), inter_pu_jc (p = 0.000<.05) and inter_pu_ps (p = 0.018<.05) are statistically significant predictors whereas Info_Proc (p = 0.133>.05), Skill_Variety (p = 0.490>.05), Specialization (p = 0.126>.05), inter_pu_ip (p = 0.122>.05) and inter_pu_sv (p =0.234>.05) are statistically not significant variables.

Table 5-18f (Appendix G) presented model 6 from table 5-18. This model analyzes the relationships between knowledge characteristics and EKDB. In addition, this model also analyzes the moderating effect of PU on the relationships between all knowledge characteristics and EKDB. Results for hierarchical multiple regression are shown in table 5-18 which shows that R = 0.900, R square = 0.809 and adjusted R square = 0.804. This adjusted R square value shows that 80.4% change in EKDB can be observed because of predictors of this model. P value is 0.000<.05 thus showing that model is statistically significant as well. Table 5-18f (Appendix G) shows the individual effect of each predictor on EKDB. Statistically significant predictors are: Job_Complexity (p = 0.000<.05), Prob_Sol (p = 0.025<.05), inter_pu_jc (p = 0.000<.05) and inter_pu_ps (p = 0.019<.05). Statistically non-significant predictors include: Info_Proc (p = 0.205>.05), Skill_Variety (p = 0.459>.05), Socialization (p = 0.501>.05), inter_pu_ip (p = 0.192>.05), inter_pu_sv (p = 0.228>.05) and inter_pu_spec (p = 0.787>.05). Those predictors whose p value is more than 0.05 are statistically not significant otherwise they are statistically significant.

## 5.19 Relationship between Knowledge Characteristics, PU and EKCB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-18: Components of Models 1-6 between knowledge characteristics, PU and EKCB

Figure 5-18 shows the components of models 1-6 in table 5-19. These models analyze the relationships between knowledge characteristics (independent variable), PU (moderating variable) and EKCB (dependent variable). Results for hierarchical multiple regression analysis for these models are shown in table 5-19.

Model 1 is about the relationships between knowledge characteristics as predictor of EKCB (predicted variable). Value for R for this model is 0.851, R square = 0.724 and adjusted R square = 0.721. This shows that 72.1% variance in EKCB can be observed by predictors of model 1. P value for this model is 0.000 which is less than 0.05 thus making it a statistical significant model.

Table 5-19: Models between Knowledge Characteristics, PU and EKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.724 | 0.721 | 0.543 | 0.724 | 188.175 | 6 | 358 | 0.000 | 0.000 |
| 2 | .872[b] | 0.760 | 0.755 | 0.508 | 0.035 | 52.180 | 1 | 357 | 0.000 | 0.000 |
| 3 | .892[c] | 0.795 | 0.791 | 0.469 | 0.035 | 61.331 | 1 | 356 | 0.000 | 0.000 |
| 4 | .894[d] | 0.799 | 0.794 | 0.465 | 0.004 | 7.189 | 1 | 355 | 0.008 | 0.000 |
| 5 | .894[e] | 0.799 | 0.794 | 0.466 | 0.000 | 0.162 | 1 | 354 | 0.688 | 0.000 |
| 6 | .894[f] | 0.799 | 0.794 | 0.466 | 0.000 | 0.604 | 1 | 353 | 0.438 | 0.000 |
| a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu | | | | | | | | | | |
| b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc | | | | | | | | | | |
| c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip | | | | | | | | | | |
| d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps | | | | | | | | | | |
| e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv | | | | | | | | | | |
| f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv, inter_pu_spec | | | | | | | | | | |

Table 5-19 presents model 1. Individual effect of these predictors of model 1 on EKCB are shown in table 5-19a (Appendix G). Based on p value, Skill_Variety (p = 0.000) and Specialization (p = 0.001) are the two predictors which are statistically significant because their p values are less than 0.05 significance level. Predictors which are not statistically significant include Job_Complexity (p = 0.490), Info_Proc (p = 0.277) and Prob_Sol (p = 0.054) because their p values are more than 0.05.

Model 2 from table 5-19 is presented in table 5-19b (Appendix G). This model shows the moderating effect of PU on the relationship between job complexity and EKCB besides analyzing the knowledge characteristics and EKCB relationships. Results for regression analysis for this model are shown in table 5-19. R value = 0.872, R square = 0.760 and adjusted R square = 0.755 which means that 75.5% variance in EKCB can be predicted by predictors of model 2. P = 0.000<.05 for this model which makes it a statistically significant model. Table 5-19b (Appendix G) shows the results of individual effect of each predictor on EKCB in model 2. Job_Complexity (p = 0.000<.05), Skill_Variety (p = 0.003<.05), Specialization (p = 0.002<.05) and inter_pu_jc (p = 0.000<.05) are statistically significant predictors whereas the only non-significant predictors are Info_Proc (p = 0.974>.05) and Prob_Sol (p = 0.373>.05).

Table 5-19c (Appendix G) presents model 3 from table 5-19. This model and table is about the moderating effect of PU on the relationships between job complexity, information processing and EKCB. Besides, this model and table also shows the effect of knowledge characteristics and EKCB. Results for regression analysis for this model are shown in table 5-19. Based on these results, R = 0.892, R square = 0.795 and adjusted R square = 0.791 which means that 79.1% change in EKCB can be observed because of predictors of model 3. P value for this model is 0.000 which is less than 0.05 thus suggesting that model is statistically significant. Results for the effect of individual predictor on EKCB are shown in table 5-19c (Appendix G). Job_Complexity (p = 0.000<.05), Info_Proc (p = 0.000<.05), Skill_Variety (p = 0.004<.05), Specialization (p = 0.009<.05), inter_pu_jc (p = 0.000<.05) and inter_pu_ip (p = 0.000<.05) are all statistically significant predictors. Prob_Sol (p = 0.221>.05) is the only predictor with statistically insignificance.

Moderating effect of PU on the relationships between job complexity, information processing, problem solving and EKCB is shown in table 5-19d (Appendix G) which presents model 4. This model also analyzes the relationships between knowledge characteristics and EKCB. Regression results for this model are shown in table 5-19. Value of R for this model is 0.894, R square = 0.799 and adjusted R square = 0.794 which means that 79.4% variance in EKCB can be predicted by predictors of model 4. P = 0.000<.05 for this model which shows its statistical significance. Table 5-19d (Appendix G) shows the individual effect of each predictor on EKCB. Based on p values, Job_Complexity, Prob_Sol, Skill_Variety, Specialization, inter_pu_jc and inter_pu_ps are statistically significant predictors of EKCB in model 4 because their p values are lower than 0.05 significance level. Info_Proc and inter_pu_ip are not statistically significant predictors based on their p values which are higher than 0.05.

Model 5 is about analyzing the moderating effect of PU on the relationships between job complexity, information processing, problem solving, skill variety and EKCB. In addition, this model also analyzes the relationship between knowledge characteristics and EKCB. This model is presented through figure 5-19. Table 5-19 shows the regression results for this model. Value of R = 0.894, R square = 0.799 and adjusted R square = 0.794 which means that 79.4% variance in EKCB can be observed because of predictors of model 5. P = 0.000<.05 for this model which shows the statistical significance of the model. Results for the individual effect of each predictor of model 5 on EKCB are shown in table 5-19e (Appendix G). P values for Job_Complexity, Prob_Sol, Specialization, inter_pu_jc and inter_pu_ps are 0.000, 0.009, 0.019, 0.000 and 0.017 respectively. All these predictors are statistically significant as their p values are lower than 0.05. P values for Info_Proc, Skill_Variety and inter_pu_ip are 0.372, 0.743 and 0.369 respectively. These predictors are statistically not significant because of their p values which are higher than 0.05.

Table 5-19f (Appendix G) presents model 6 from table 5-19. This model is about the moderating effect of PU on all the relationships between knowledge characteristics and EKCB besides analyzing the relationships between knowledge characteristics and EKCB. Multiple regression results for this model are shown in table 5-19. Based on regression analysis, R = 0.894, R square = 0.799 and adjusted R square = 0.794. This shows that 79.4% change in EKCB can be observed because of the predictors of model 6. P value for this model is 0.000<.05 thus shows that the model is statistically significant. Table 5-19f (Appendix G) shows the results for the individual effect of each variable on EKCB. Job_Complexity (p = 0.000<.05), Prob_Sol (p = 0.021<.05), inter_pu_jc (p = 0.000<.05) and inter_pu_ps (p = 0.036<.05) are statistically significant predictors in this model whereas Info_Proc (p = 0.259>.05), Skill_Variety (p = 0.576>.05), Specialization (p = 0.911>.05), inter_pu_ip (p = 0.256>.05), inter_pu_sv (p = 0.924>.05) and inter_pu_spec (p = 0.438>.05) are statistically not significant.

### 5.20 Relationship between Knowledge Characteristics, PU and IKDB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-19: Components of Models 1-6 between knowledge characteristics, PU and IKDB

Table 5-20 shows the results for hierarchical multiple regression analysis for models 1-6. Components of these models are presented in figure 5-19. These models are about the relationships between knowledge characteristics (independent variable), PU (moderating variable) and IKDB (dependent variable).

Model 1 is about the relationship between knowledge characteristics and IKDB as presented in figure 5-19. Regression results for this model are shown in table 5-20. Value of R for this model is 0.845, R square = 0.714 and adjusted R square = 0.710 which means that 71% variance in IKDB can be predicted by independent variables of model 1. P value for this model is 0.000 which is less than 0.05 thus showing that this model is statistically significant.

Table 5-20: Models between Knowledge Characteristics, PU and IKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .845[a] | 0.714 | 0.710 | 0.559 | 0.714 | 179.014 | 6 | 358 | 0.000 | 0.000 |
| 2 | .864[b] | 0.747 | 0.743 | 0.527 | 0.033 | 46.381 | 1 | 357 | 0.000 | 0.000 |
| 3 | .884[c] | 0.782 | 0.778 | 0.490 | 0.035 | 57.131 | 1 | 356 | 0.000 | 0.000 |
| 4 | .887[d] | 0.787 | 0.782 | 0.485 | 0.005 | 8.375 | 1 | 355 | 0.004 | 0.000 |
| 5 | .887[e] | 0.787 | 0.782 | 0.485 | 0.000 | 0.583 | 1 | 354 | 0.446 | 0.000 |
| 6 | .887[f] | 0.788 | 0.782 | 0.486 | 0.000 | 0.163 | 1 | 353 | 0.686 | 0.000 |
| a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu | | | | | | | | | | |
| b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc | | | | | | | | | | |
| c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip | | | | | | | | | | |
| d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps | | | | | | | | | | |
| e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv | | | | | | | | | | |
| f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv, inter_pu_spec | | | | | | | | | | |

Model 1 is presented in table 5-20. Individual effect of each predictor of model 1 on IKDB is shown in table 5-20a (Appendix G). Prob_Sol ($p = 0.009<.05$), Skill_Variety ($p = 0.000<.05$) and Specialization ($p = 0.001<.05$) are the predictors of this model which are statistically significant. Job_Complexity ($p = 0.676>.05$) and Info_Proc ($p = 0.684>.05$) are statistically not significant. Statistical significance and non-significance is based on p value which should be less than 0.05 for statistical significance otherwise that variable(s) will be statistically not significant.

Table 5-20b (Appendix G) presents model 2 which is about the moderating effect of PU on the relationships between job complexity and IKDB besides analyzing the relationships between knowledge characteristics and IKDB. Regression results for this model are shown in table 5-20. Value of R = 0.864, R square = 0.747 and adjusted R square = 0.743 which shows that 74.3% variance in IKDB can be observed because of predictors of model 2. $P = 0.000<.05$ for this model which shows that model is statistically significant. Table 5-20b (Appendix G) presents the results for the individual effect of each variable (predictor) on IKDB in this model. P value for Job_Complexity, Skill_Variety, Specialization and inter_pu_jc are 0.000, 0.010, 0.002

and 0.000 respectively. These p values are less than 0.05 therefore the variables with these p values are statistically significant. Info_Proc and Prob_Sol have 0.492 and 0.098 p values respectively. Both these variables are statistically not significant because these p values are higher than 0.05.

Model 3 is about the relationships between knowledge characteristics and IKDB. Besides, this model also analyzes the moderating effect of PU on the relationships between job complexity, information processing and IKDB. This model is presented through table 5-20c (Appendix G). Value of R for this model is 0.884, R square = 0.782 and adjusted R square = 0.778 which shows that 77.8% variance in IKDB can be predicted because of predictors of model 3. P value for this model is 0.000<.05 thus showing that this model is statistically significant. Table 5-20c (Appendix G) presents the results for the individual effect of each predictor on IKDB. Job_Complexity (p = 0.000<.05), Info_Proc (p = 0.000<.05), Skill_Variety (p = 0.013<.05), Specialization (p = 0.009<.05), inter_pu_jc (p = 0.000<.05) and inter_pu_ip (p = 0.000<.05) are statistically significant predictors because of their p values. Prob_Sol (p = 0.719>.05) is the only statistically non-significant predictor.

Moderating effect of PU on the relationships between job complexity, information processing, problem solving and IKDB is presented through table 5-20d (Appendix G). This table also presents the relationships between knowledge characteristics and IKDB. Regression results for this model are shown in table 5-20. Based on these results, value of R = 0.887, R square = 0.787 and adjusted R square = 0.782 which means that 78.2% change in IKDB can be observed because of predictors of model 4. P = 0.000<.05 for this model which shows that model 4 is statistically significant. Results for the individual effect of each predictor of model 4 on IKDB is shown in table 5-20d (Appendix G). P value for Job_Complexity, Prob_Sol, Skill_Variety, Specialization, inter_pu_jc and inter_pu_ps are 0.000, 0.004, 0.020, 0.015, 0.000 and 0.004 respectively. All these predictors are statistically significant because of their p values which are lower than 0.05 significance level. Info_Proc and inter_pu_ip have p values 0.404 and 0.278 respectively. Both these variables are statistically not significant.

Table 5-20e (Appendix G) is about the moderating effect of PU on the relationships between job complexity, information processing, problem solving, skill variety and IKDB. In addition to this, this table also shows the relationships between knowledge characteristics and IKDB. Table 5-20e (Appendix G) presents model 5 from table 5-20 which shows the results for hierarchical multiple regression analysis. Value of R for this model is 0.887, R square = 0.787 and adjusted R square = 0.782. This shows that 78.2% variance or change in IKDB can be predicted because of predictors of model 5. p value for this model is 0.000 which is less than 0.05 thus showing that this model is statistically significant. Table 5-20e (Appendix G) presents the results for the individual effect of each predictor of model 5 on IKDB. Job_Complexity (p = 0.000<.05), Prob_Sol (p = 0.014<.05), Specialization (p = 0.022<.05), inter_pu_jc (p = 0.000<.05) and inter_pu_ps (p = 0.014<.05) are statistically significant predictors of this model. Info_Proc (p = 0.261>.05), Skill_Variety (p = 0.897>.05), inter_pu_ip (p = 0.185>.05) and inter_pu_sv (p = 0.446>.05) are statistically not significant predictors.

Model 6 in is about the moderating effect of PU on the relationships between knowledge characteristics and IKDB. Besides, this model also analyzes the relationships between knowledge characteristics and IKDB. Model 6 is presented through table 5-20f (Appendix G). Results for regression analysis for this model are shown in table 5-20. Value of R = 0.887, R square = 0.788 and adjusted R square = 0.782 which means that 78.2% variance in IKDB can be observed because of predictors of model 6. P = 0.000<.05 for this model which shows its statistical significance. Results for individual effect of each predictor of model 6 on IKDB are shown in table 5-20f (Appendix G). These results show that Job_Complexity (p = 0.000), Prob_Sol (p = 0.024), inter_pu_jc (p = 0.000) and inter_pu_ps (p = 0.023) are statistically significant predictors as their p values are lower than 0.05. Statistically non-significant predictors include Info_Proc (p = 0.234), Skill_Variety (p = 0.994), Specialization (p = 0.815), inter_pu_ip (p = 0.170), inter_pu_sv (p = 0.571) and inter_pu_spec (p = 0.686). These predictors are statistically not significant because their p values are higher than 0.05 significance level.

### 5.21 Relationship between Knowledge Characteristics, PU and IKCB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-20: Components of Models 1-6 between knowledge characteristics, PU and IKCB

Figure 5-20 shows the components of models 1-6 from table 5-21. These models include knowledge characteristics (independent variable), PU (moderating variable) and IKCB (dependent variable). Models are tested through hierarchical multiple regression and the results for regression analysis are shown in table 5-21.

Relationships between knowledge characteristics and IKDB are presented through model 1. Value of R for this model is 0.849, R square = 0.720 and adjusted R square = 0.717 which shows that 71.7% variance in IKCB can be predicted by the predictors of model 1. P = 0.000<.05 for this model which shows the statistical significance of the model.

Table 5-21: Models between Knowledge Characteristics, PU and IKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .849[a] | 0.720 | 0.717 | 0.546 | 0.720 | 184.554 | 6 | 358 | 0.000 | 0.000 |
| 2 | .869[b] | 0.755 | 0.750 | 0.513 | 0.034 | 49.599 | 1 | 357 | 0.000 | 0.000 |
| 3 | .889[c] | 0.790 | 0.786 | 0.475 | 0.035 | 60.153 | 1 | 356 | 0.000 | 0.000 |
| 4 | .891[d] | 0.794 | 0.790 | 0.471 | 0.004 | 7.195 | 1 | 355 | 0.008 | 0.000 |
| 5 | .892[e] | 0.795 | 0.790 | 0.471 | 0.001 | 1.047 | 1 | 354 | 0.307 | 0.000 |
| 6 | .892[f] | 0.795 | 0.789 | 0.471 | 0.000 | 0.746 | 1 | 353 | 0.388 | 0.000 |
| a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu | | | | | | | | | | |
| b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc | | | | | | | | | | |
| c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip | | | | | | | | | | |
| d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps | | | | | | | | | | |
| e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv | | | | | | | | | | |
| f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, pu, inter_pu_jc, inter_pu_ip, inter_pu_ps, inter_pu_sv, inter_pu_spec | | | | | | | | | | |

Table 5-21 presents model 1. Tale 5-21a (Appendix G) shows the results for the individual effect of each predictor on IKCB. Info_Proc ($p = 0.041$), Prob_Sol ($p = 0.039$), Skill_Variety ($p = 0.000$) and Specialization ($p = 0.007$) are the predictors in model 1 which are statistically significant because of their p values which are less than 0.05 significance level. Job_Complexity ($p = 0.711$) is the only predictor which is statistically not significant based on the p value which is higher than 0.05.

Model 2 is about the moderating effect of PU on the relationship between job complexity and IKCB. Besides, this model is also about the relationships between knowledge characteristics and IKCB. Model 2 is presented in table 5-21b (Appendix G). Regression results for this model are shown in table 5-21. R = 0.869, R square = 0.755 and adjusted R square = 0.750 which means that 75% change in IKCB can be predicted because of predictors of model 2. $P = 0.000<.05$ for this model which shows that model 2 is statistically significant. Table 5-21b (Appendix G) presents the results for the individual effect of each predictor on IKCB. P values for Job_Complexity, Skill_Variety, Specialization and inter_pu_jc are 0.000, 0.039, 0.016 and 0.000 respectively. These p values are less than 0.05 significance level therefore these variables are statistical significant predictors in model 2. P values for Info_Proc and Prob_Sol are 0.317 and 0.288 respectively which makes them statistically non-significant because their p values are higher than 0.05.

Table 5-21c (Appendix G) presents model 3 which is about the moderating effect of PU on the relationships between job complexity, information processing and IKCB. Table 5-21c (Appendix G) also presents the relationship between knowledge characteristics and IKCB. Table 5-21 shows the results for regression analysis for this model. Based on this analysis, R = 0.889, R square = 0.790 and adjusted R square = 0.786 which shows that 78.6% variance in IKCB can be predicted because of predictors of model 3. P value for this model is 0.000 which is less than 0.05 thus making it a statistically significant model. Individual effect of each variable on IKCB is shown in table 5-21c (Appendix G). Job_Complexity ($p = 0.000<.05$), Info_Proc ($p = 0.001<.05$), inter_pu_jc ($p = 0.000<.05$) and inter_pu_ip ($p = 0.000<.05$) are statistically significant predictors in model 2. Prob_Sol ($p = 0.304>.05$), Skill_Variety ($p = 0.051>.05$) and Specialization ($p = 0.056>.05$) are statistically not significant predictors.

Moderating effect of PU on the relationships between job complexity, information processing, problem solving and IKCB are shown in model 4 which is presented by table 5-21d (Appendix G). This model and table also includes the relationships between knowledge characteristics and IKCB. Value of R for this model is 0.891, R square = 0.794 and adjusted R square = 0.790 which shows that 79% variance in IKCB can be observed because of predictors of model 4. P value for this model is 0.000 which is less than 0.05 thus making model 4 a statistically significant model. Table 5-21d (Appendix G) shows the results for the individual effect of each predictor on IKCB. Job_Complexity ($p = 0.000<.05$), Prob_Sol ($p = 0.004<.05$), inter_pu_jc ($p = 0.000<.05$) and inter_pu_ps ($p = 0.008<.05$) are statistically significant predictors of IKCB in model 4. Info_Proc ($p = 0.232>.05$), Skill_Variety ($p = 0.072>.05$), Specialization ($p = 0.085>.05$) and inter_pu_ip ($p = 0.403>.05$) are statistically not significant predictors of IKDB in model 4.

Model 5 is about the moderating effect of PU on the relationships between job complexity, information processing, problem solving, skill variety and IKCB. This model is also about the relationships between knowledge characteristics and IKCB. Model 5 is presented through table 5-21e (Appendix G). Results for hierarchical multiple regression for this model are shown in table 5-21. R = 0.892, R square = 0.795 and adjusted R square = 0.790. This adjusted R square value shows that 79% variance in IKCB can be predicted by predictors of model 5. P = 0.000<.05 for this model which shows that this model is statistically significant. Individual effect of each predictor of model 5 on IKCB is shown in table 5-21e (Appendix G). P values for Job_Complexity, Prob_Sol, inter_pu_jc and inter_pu_ps are 0.000, 0.019, 0.000 and 0.029 respectively. All these p values are lower than 0.05 therefore variables with these p values are statistically significant. p values for statistically non-significant variables Info_Proc, Skill_Variety, Specialization, inter_pu_ip and inter_pu_sv are 0.117, 0.604, 0.118, 0.204 and 0.307 respectively.

Table 5-21f (Appendix G) presents model 6 which is about the relationships between knowledge characteristics and IKCB. This model is also about the moderating effect of PU on all the relationships between knowledge characteristics and IKCB. Results for hierarchical multiple regression are shown in table 5-21. Value of R for this model is 0.892, R square = 0.795 and adjusted R square = 0.789. This shows that 78.9% variance/change in IKCB in model 6 can be predicted by the predictors present in model 6. p value for this model is 0.000 which is less than 0.05 thus making it a statistically significant model. Table 5-21f (Appendix G) shows the individual effect of each predictor of model 6 on IKCB. Job_Complexity (p = 0.000<.05), Prob_Sol (p = 0.042<.05) and inter_pu_jc (p = 0.000<.05) are statistically significant predictors in model 6. All other predictors are statistically not significant.

### 5.22 Relationship between Knowledge Characteristics, PEOU, PU and EKDB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-21: Components of Models 1-6 between Knowledge characteristics, PEOU, PU and EKDB

Figure 5-21 presents the components for models 1-6 mentioned in table 5-22. These models have some or all of the components from the following: knowledge characteristics (independent variable), PEOU and PU (moderating variables) and EKDB (dependent variable). Models are tested through hierarchical multiple regression and results are shown in table 5-22.

Model 1 is about the effect of knowledge characteristics as independent variable on EKDB as dependent variable. Regression analysis show that R = 0.851, R square = 0.724 and adjusted R square = 0.721 which means that 72.1% variance in EKDB can be observed because of predictors of model 2. P value for this model is 0.000<.05 thus showing that model is statistically significant.

Table 5-22: Models between Knowledge Characteristics, PEOU, PU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.724 | 0.721 | 0.541 | 0.724 | 188.159 | 7 | 358 | 0.000 | 0.000 |
| 2 | .852[b] | 0.725 | 0.721 | 0.541 | 0.001 | 1.293 | 1 | 357 | 0.256 | 0.000 |
| 3 | .857[c] | 0.734 | 0.729 | 0.533 | 0.009 | 11.673 | 1 | 356 | 0.001 | 0.000 |
| 4 | .857[d] | 0.735 | 0.729 | 0.533 | 0.001 | 0.899 | 1 | 355 | 0.344 | 0.000 |
| 5 | .857[e] | 0.735 | 0.728 | 0.533 | 0.000 | 0.620 | 1 | 354 | 0.432 | 0.000 |
| 6 | .858[f] | 0.736 | 0.728 | 0.533 | 0.001 | 0.909 | 1 | 353 | 0.341 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv, inter_peou_pu_spec

Model 1 is presented through table 5-22. Results for the effect of each predictor of model 2 on EKDB are shown in table 5-22a (Appendix G). Based on these results, Prob_Sol (p = 0.001<.05), Skill_Variety (p = 0.000<.05) and Specialization (p = 0.006<.05) are statistically significant predictors in model 2 for EKDB. Job_Complexity (p = 0.810>.05) and Info_Proc (p = 0.264>.05) are statistically not significant predictors based on their p values which are greater than 0.05.

Model 2 is presented in table 5-22b (Appendix G). This model analyzes the relationships between knowledge characteristics and EKDB besides the moderating effect of PEOU and PU on the relationships between job complexity and EKDB. Results for regression analysis for this model are shown in table 5-22. Value of R = 0.852, R square = 0.725 and adjusted R square = 0.721. This shows that 72.1% change in EKDB can be observed because of the predictors of model 2. P = 0.000<.05 for this model which shows it as a statistically significant model. Table 5-22b (Appendix G) presents the results for the individual effect of each variable on EKDB. Prob_Sol (p = 0.002<.05), Skill_Variety (p = 0.000<.05) and Specialization (p =

0.006<.05) are the predictors which have statistically significant p values whereas Job_Complexity (p = 0.465>.05), Info_Proc (p = 0.349>.05) and inter_peou_pu_jc (p = 0.256>.05) have statistically no significant p values.

Table 5-22c (Appendix G) presents model 3 from table 5-22. This model is about the moderating effect of PEOU and PU on the relationships between job complexity, information processing and EKDB. This model also looks for the effect of knowledge characteristics (independent variable) on EKDB (dependent variable). Regression results for this model are shown in table 5-22. R = 0.857, R square = 0.734 and adjusted R square = 0.729. This adjusted R square value shows that 72.9% variance in EKDB can be observed because of the predictors of model 3. P value for this model is 0.000 which is less than 0.05 significance level therefore this model is statistically significant. Individual effect of each predictor of model 3 on EKDB is shown in table 5-22c (Appendix G). P values for Job_Complexity, Prob_Sol, Skill_Variety, Specialization, inter_peou_pu_jc and inter_peou_pu_ip are 0.010, 0.005, 0.000, 0.006, 0.001 and 0.001 respectively. As these p values are less than 0.05 therefore these variables are statistically significant. The only predictor which is statistically not significant is Info_Proc (p = 0.078>.05).

Model 4 is about the moderating effect of PEOU and PU on the relationships between job complexity, information processing, problem solving and EKDB. Besides, this model also analyzes the relationships between knowledge characteristics and EKDB. Model 4 is presented in table 5-22d (Appendix G). Regression results for this model are shown in table 5-22. R value = 0.857, R square = 0.735 and adjusted R square = 0.729 which means that 72.9% change in EKDB can be observed due to the predictors of model 4. Value of p for this model is 0.000 which shows that model is statistically significant. Table 5-22d (Appendix G) presents the results for the effect of each predictor of model 4 on EKDB. Job_Complexity (p = 0.010<.05), Skill_Variety (p = 0.000<.05), Specialization (p = 0.007<.05) and inter_peou_pu_jc (p = 0.001<.05) are the predictors which are statistically significant. Info_Proc (p = 0.090>.05), Prob_Sol (p = 0.800>.05), inter_peou_pu_ip (p = 0.149>.05) and inter_peou_pu_ps (p = 0.344>.05) are statistically not significant predictors.

Moderating effect of PEOU and PU on the relationship between job complexity, information processing, problem solving, skill variety and EKDB are analyzed in model 5 and presented through table 5-22e (Appendix G). This model also analyzes the relationships between knowledge characteristics and EKDB. Results for multiple regression analysis for this model are shown in table 5-22. Value of R = 0.857, R square = 0.735 and adjusted R square = 0.728 which shows that 72.8% variance in EKDB can be predictors because of predictors of model 5. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Individual effect of each variable on EKDB in model 5 is shown in table 5-22e (Appendix G). Based on p value, statistically significant variables (p<.05) are Job_Complexity (p = 0.012), Specialization (p = 0.008) and inter_peou_pu_jc (p = 0.002). Statistically non-significant predictors are Info_Proc (p = 0.065), Prob_Sol (p = 0.652), Skill_Variety (p = 0.401), inter_peou_pu_ip (p = 0.104), inter_peou_pu_ps (p = 0.480) and inter_peou_pu_sv (p = 0.432).

Model 6 which is presented through table 5-22f (Appendix G) shows the moderating effect of PEOU and PU on all the relationships between knowledge characteristics and EKDB. In addition, this model also analyzes the relationships between knowledge characteristics and EKDB. Results for regression analysis for model 6 are shown in table 5-22. Based on these results, R = 0.858, R square = 0.736 and adjusted R square = 0.728 which means that 72.8% variance. Change in EKDB can be predicted or observed through predictors of model 6. P value for this model is 0.000<.05 thus showing that model 6 is statistically significant. Table 5-22f (Appendix G) shows the individual effect of each predictor on EKDB in model 6. Job_Complexity (p = 0.013<.05), Info_Proc (p = 0.040<.05) and inter_peou_pu_jc (p = 0.002<.05) are statistically significant predictors in model 6 whereas all other are statistically not significant.

### 5.23 Relationship between Knowledge Characteristics, PEOU, PU and EKCB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-22: Components of Models 1-6 between Knowledge characteristics, PEOU, PU and EKCB

Table 5-23 shows the results for hierarchical multiple regression analysis for models 1-6. Components of these models are presented in figure 5-22. These components include knowledge characteristics (independent variables), PEOU and PU (moderating variables) and EKCB (dependent variable).

Regression results for model 1 are shown in table 5-23. This model is about the effect of knowledge characteristics (independent variable) on EKCB (dependent variable). Value of R = 0.851, R square = 0.724 and adjusted R square = 0.721 which shows that 72.1% variance in EKCB can be observed due to predictors of model 1. P value for this model is 0.000 which is less than 0.05 thus making it a statistically significant model.

Table 5-23: Models between Knowledge Characteristics, PEOU, PU and EKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.724 | 0.721 | 0.543 | 0.724 | 188.175 | 7 | 358 | 0.000 | 0.000 |
| 2 | .851[b] | 0.725 | 0.720 | 0.543 | 0.000 | 0.187 | 1 | 357 | 0.666 | 0.000 |
| 3 | .855[c] | 0.731 | 0.726 | 0.538 | 0.006 | 8.526 | 1 | 356 | 0.004 | 0.000 |
| 4 | .855[d] | 0.731 | 0.725 | 0.538 | 0.000 | 0.020 | 1 | 355 | 0.889 | 0.000 |
| 5 | .855[e] | 0.731 | 0.724 | 0.539 | 0.000 | 0.256 | 1 | 354 | 0.613 | 0.000 |
| 6 | .855[f] | 0.732 | 0.724 | 0.539 | 0.001 | 0.712 | 1 | 353 | 0.399 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv, inter_peou_pu_spec

Model 1 is presented through table 5-23. Results for the individual effect of each predictor of model 1 on EKCB are shown in table 5-23a (Appendix G). Statistical significance or insignificance for predictors of model 1 is analyzed through p value which should be less than 0.05 for statistical significance otherwise that particular predictor will be statistically not significant. Statistically significant predictors are Skill_Variety (p = 0.000) and Specialization (p = 0.001). Statistically non-significant variables are Job_Complexity (p = 0.490), Info_Proc (p = 0.277) and Prob_Sol (p = 0.054).

Table 5-23b (Appendix G) presents model 2 which is about the moderating effect of PEOU and PU on the relationship between job complexity and EKCB. Besides, this model also analyzes the relationships between knowledge characteristics and EKCB. Regression results for this model are shown in table 5-23. R = 0.851, R square = 0.725 and adjusted R square = 0.720. This shows that 72% change in EKCB can be predicted due to predictors of model 2. P value for this model is 0.000<.05 thus making it a statistically significant model. Table 5-23b (Appendix G) shows the individual effect of each predictor on EKCB. Skill_Variety ($p = 0.000 < .05$) and Specialization ($p = 0.001 < .05$) are the two predictors which are statistically significant. Job_Complexity ($p = 0.922 > .05$), Info_Proc ($p = 0.312 > .05$), Prob_Sol ($p = 0.060 > .05$) and inter_peou_pu_jc ($p = 0.666 > .05$) are statistically not significant predictors in model 2.

Model 3 is presented in table 5-23c (Appendix G). This model is about the moderating effect of PEOU and PU on the relationships between job complexity, information processing and EKCB. Besides, this model also analyzes the relationships between knowledge characteristics and EKCB. Results for regression analysis for this model are shown in table 5-23. Value of R for this model is 0.855, R square = 0.731 and adjusted R square = 0.726 which means that 72.6% variance in EKCB can be predicted because of predictors of model 3. $P = 0.000 < .05$ for this model which shows that model 3 is statistically significant. Effect of each variable individually on EKCB is shown in table 5-23c (Appendix G). Skill_Variety ($p = 0.000 < .05$), Specialization ($p = 0.001 < .05$), inter_peou_pu_jc ($p = 0.008 < .05$) and inter_peou_pu_ip ($p = 0.004 < .05$) are statistically significant predictors because of their p values while Job_Complexity ($p = 0.103 > .05$), Info_Proc ($p = 0.087 > .05$) and Prob_Sol ($p = 0.108 > .05$) are statistically not significant predictors.

Moderating effect of PEOU and PU on the relationships between job complexity, information processing, problem solving and EKCB are presented in table 5-23d (Appendix G) which presents model 4 from table 5-23. This table also presents the relationships between knowledge characteristics and EKCB. Regression results for model 4 are shown in table 5-23. R value for this model is = 0.855, R square = 0.731 and adjusted R square = 0.725 which shows that 72.5% change in EKCB can be observed because of predictors of mode 4. P value for this model is 0.000 which is less than 0.05 thus making it a statistically significant model. Table 5-23d (Appendix G) shows the individual effect of each predictor of model 4 on EKCB. P values for Skill_Variety, Specialization, and inter_peou_pu_jc are 0.000, 0.001 and 0.010 respectively which means that these three predictors are statistically significant in model 3. P value for statistically non-significant predictors Job_Complexity, Info_Proc, Prob_Sol, inter_peou_pu_ip and inter_peou_pu_ps are 0.104, 0.332, 0.606, 0.567 and 0.889 respectively.

Model 5 is presented in table 5-23e (Appendix G) which is about the moderating effect of PEOU and PU on the relationships between job complexity, information processing, problem solving, skill varity and EKCB. Besides, this model also analyzes the relationships between knowledge characteristics and EKCB. Results for regression analysis for this model are shown in table 5-23. Regression results show that value of R = 0.855, R square = 0.731 and adjusted R square = 0.724 which means that 72.4% change in EKCB can be observed because of the predictors of model 5. P = 0.000<.05 for this model which makes it a statistically significant model. Individual effect of each predictor of model 5 on EKCB is shown in table 5-23e (Appendix G). Specialization (p = 0.001<.05) and inter_peou_pu_jc (p = 0.012<.05) are the only two predictors which are statistically significant in this model whereas all other predictors are statistically not significant based on the p value they have.

Table 5-23f (Appendix G) presents model 6 from table 5-23. This model analyzes the relationships between knowledge characteristics and EKCB. In addition, this model also analyzes the moderating effect of PEOU and PU on the relationships between all knowledge characteristics and EKCB. Table 5-23 shows the regression results for model 6. Value of R = 0.855, R square = 0.732 and adjusted R square = 0.724. This shows that 72.4% variance in EKCB can be predicted based on the predictors of model 6. P value for this model is 0.000<.05 thus making model 6 a statistically significant model. Table 5-23f (Appendix G) shows the results for the individual effect of each predictor of model 6 on EKCB. Based on p value of every predictor, only inter_peou_pu_jc (p = 0.011<.05) is statistically significant whereas all other predictors for this model are statistically not significant.

## 5.24 Relationship between Knowledge Characteristics, PEOU, PU and IKDB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-23: Components of Models 1-6 between Knowledge characteristics, PEOU, PU and IKDB

Components of models 1 1-6 from table 5-24 are shown in figure 5-23. These components include knowledge characteristics (independent variables), PEOU and PU (moderating variables) and IKDB (dependent variable). Hierarchical multiple regression analysis are conducted for these models and their results are shown in table 5-24.

Model 1 is about the relationship between knowledge characteristics (independent variable) and IKDB (dependent variable). Regression result show that value of R = 0.845, R square = 0.714 and adjusted R square = 0.710 which shows the fitness of the model. This means that 71% variance in IKDB can be observed because of the predictors of model 1. P value for this model is 0.000 which is less than 0.05 thus making this model statistically significant.

Table 5-24: Models between Knowledge Characteristics, PEOU, PU and IKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. Error of the Estimate | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .845[a] | 0.714 | 0.710 | 0.559 | 0.714 | 179.014 | 7 | 358 | 0.000 | 0.000 |
| 2 | .845[b] | 0.714 | 0.710 | 0.560 | 0.000 | 0.043 | 1 | 357 | 0.836 | 0.000 |
| 3 | .850[c] | 0.722 | 0.716 | 0.554 | 0.007 | 9.572 | 1 | 356 | 0.002 | 0.000 |
| 4 | .850[d] | 0.722 | 0.716 | 0.554 | 0.000 | 0.232 | 1 | 355 | 0.630 | 0.000 |
| 5 | .850[e] | 0.722 | 0.715 | 0.555 | 0.000 | 0.112 | 1 | 354 | 0.738 | 0.000 |
| 6 | .850[f] | 0.722 | 0.714 | 0.556 | 0.000 | 0.224 | 1 | 353 | 0.637 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv, inter_peou_pu_spec

Table 5-24 presents model 1 which is about the effect of knowledge characteristics on IKDB. Individual effect of each predictor of model 1 on IKDB is shown in table 5-24a (Appendix G). P values from table 5-24a (Appendix G) shows the statistical significance or insignificance of each predictor based on the criteria that if p<.05 for a particular predictor then it will be statistical significant otherwise non-significant. Based on this criteria, statistically significant predictors are Prob_Sol (p = 0.009), Skill_Variety (p = 0.000) and Specialization (p = 0.001). Other predictors Job_Complexity (p = 0.676) and Info_Proc (p = 0.684) are statistically not significant.

Model 2 from table 5-24 is presented through table 5-24b (Appendix G). This model is about the moderating effect of PEOU and PU on the relationship between job complexity and IKDB. Besides, this model also analyzes the relationship between knowledge characteristics and IKDB. Regression results for this model are shown in table 5-24. R = 0.845, R square = 0.714 and adjusted R square = 0.710 which means that 71% change in IKDB can be observed because of the predictors in model 2. P = 0.000<.05 for this model which shows the statistical significance of the model. Table

5-24b (Appendix G) presents the individual effect of each predictor of model 2 on IKDB. Based on the p values from table 5-24b (Appendix G), Prob_Sol (p = 0.010<.05), Skill_Variety (p = 0.000<.05) and Specialization (p = 0.001<.05) are statistically significant predictors in this model whereas Job_Complexity (p = 0.672>.05), Info_Proc (p = 0.711>.05) and inter_peou_pu_jc (p = 0.836>.05) are statistically not significant.

Table 5-24c (Appendix G) presents model 3 from table 5-24. This model analyzes the relationship between knowledge characteristics and IKDB besides the moderating effect of PEOU and PU on the relationships between job complexity, information processing and IKDB. Results for multiple regression analysis are shown in table 5-24. Based on these results, R = 0.850, R square = 0.722 and adjusted R square = 0.716 which means that 71.6% variance in IKDB can be observed because of the predictors in model 3. P value for this model is 0.000 which is less than 0.05 thus showing that the model is statistically significant. Individual effect of each predictor on IKDB is shown in table 5-24c (Appendix G). P value for Job_Complexity, Prob_Sol, Skill_Variety, Specialization, inter_peou_pu_jc and inter_peou_pu_ip are 0.031, 0.022, 0.000, 0.001, 0.008 and 0.002 respectively. All these p values are higher than 0.05 significance level therefore the variables with these values are statistically significant. p values for statistically non-significant variable Info_Proc is 0.259. This predictor is the only statistically non-significant predictor.

Moderating effect of PEOU and PU on the relationships between job complexity, information processing, problem solving and IKDB are shown in table 5-24d (Appendix G) and analyzed in model 4. This model also analyzes the relationships between knowledge characteristics and IKDB. Results for regression analysis for this model are shown in table 5-24. Value of R = 0.850, R square = 0.722 and adjusted R square = 0.716 which shows that 71.6% variance in IKDB can be predicted because of predictors in model 4. P = 0.000<.05 for this model which shows that model 4 is statistically significant. Individual effect of each predictor on IKDB is shown in table 5-24d (Appendix G). Job_Complexity (p = 0.032<.05), Skill_Variety (p = 0.000<.05), Specialization (p = 0.001<.05) and inter_peou_pu_jc (p = 0.012<.05) are statistically significant predictors based on p values. Statistically non-significant predictors are

Info_Proc (p = 0.328>.05), Prob_Sol (p = 0.631>.05), inter_peu_pu_ip (p = 0.349>.05) and inter_peou_pu_ps (p = 0.630>.05).

Table 5-24e (Appendix G) presents model 5 from table 5-24. This model is about the moderating effect of PEOU and PU on the relationships between job complexity, information processing, problem solving, skill variety and IKDB. In addition, this model also analyzes the relationship between knowledge characteristics and IKDB. Value of R for this model is 0.850, R square = 0.722 and adjusted R square = 0.715 which means that 71.5% variance in IKDB can be predicted because of the predictors of model 5. P value for this model is 0.000 which is less than 0.05 thus suggesting the statistical significance of the model. Individual effect of each predictor of model 5 on IKDB is shown in table 5-24e (Appendix G). Statistically significant predictors are Job_Complexity (p = 0.035<.05), Specialization (p = 0.001<.05) and inter_peou_pu_jc (p = 0.013<.05). All other variables are statistically not significant because of the p values they have. i.e., p>.05.

Moderating effect of PEOU and PU on the relationships between all knowledge characteristics and IKDB are shown in table 5-24f (Appendix G) and analyzed in model 6 of table 5-24. This table and model also presents the relationships between knowledge characteristics and IKDB. Results for multiple regression analysis are shown in table 5-24 for this model. Based on this analysis, R = 0.850, R square = 0.722 and adjusted R square 0.714. This adjusted R square shows that 71.4% variance/change in IKDB can be predicted/observed because of the predictors of model 6. P value for this model is 0.000 which is less than 0.05 thus showing that model 6 is statistically significant. Table 5-24f (Appendix G) shows the results for the individual effect of each predictor of model 6 on IKDB. Job_Complexity (p = 0.035<.05), inter_peou_pu_jc (p = 0.013<.05) are the only statistically significant predictors in model 6 whereas all other predictors are statistically not significant (p>.05 for all of them).

### 5.25 Relationship between Knowledge Characteristics, PEOU, PU and IKCB

**Predictors**

- Job Complexity
- Information Processing
- Problem Solving
- Skill variety
- Specialization

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-24: Components of Models 1-6 between Knowledge characteristics, PEOU, PU and IKCB

Components for models 1-6 are presented in figure 5-24. These components include knowledge characteristics (independent variable), PEOU and PU (moderating variables) and IKCB (dependent variables). Hierarchical multiple regression analysis are performed for these models and the results are shown in table 5-25.

Model 1 is about the relationships between knowledge characteristics and IKCB. Value of R for this model is 0.849, R square = 0.720 and adjusted R square = 0.717 which shows that 71.7% variance in IKCB can be predicted because of the predictors of model 1. P value for this model is 0.000 which is less than 0.05 thus showing that model 1 is statistically significant.

Table 5-25: Models between Knowledge Characteristics, PEOU, PU and IKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .849[a] | 0.720 | 0.717 | 0.546 | 0.720 | 184.554 | 7 | 358 | 0.000 | 0.000 |
| 2 | .849[b] | 0.720 | 0.716 | 0.547 | 0.000 | 0.003 | 1 | 357 | 0.955 | 0.000 |
| 3 | .854[c] | 0.730 | 0.724 | 0.539 | 0.009 | 11.978 | 1 | 356 | 0.001 | 0.000 |
| 4 | .854[d] | 0.730 | 0.724 | 0.540 | 0.000 | 0.035 | 1 | 355 | 0.852 | 0.000 |
| 5 | .854[e] | 0.730 | 0.723 | 0.540 | 0.000 | 0.084 | 1 | 354 | 0.772 | 0.000 |
| 6 | .854[f] | 0.730 | 0.722 | 0.541 | 0.000 | 0.584 | 1 | 353 | 0.445 | 0.000 |

a. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu

b. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc

c. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip

d. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps

e. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv

f. Predictors: (Constant), Specialization, Job_Complexity, Prob_Sol, Skill_Variety, Info_Proc, peou, pu, inter_peou_pu_jc, inter_peou_pu_ip, inter_peou_pu_ps, inter_peou_pu_sv, inter_peou_pu_spec

Model 1 is presented through table 5-25. Effect of each predictor of model 1 on IKCB is shown in table 5-25a (Appendix G). Based on p value, Info_Proc ($p = 0.041 < .05$), Prob_Sol ($p = 0.039 < .05$), Skill_Variety ($p = 0.000 < .05$) and Specialization ($p = 0.007 < .05$) are statistically significant predictors for this model whereas Job_Complexity ($p = 0.711 > .05$) is the only predictor which is statistically not significant.

Table 5-25b (Appendix G) presents model 2 which is about the moderating effect of PEOU and PU on the relationships between job complexity and IKCB. Besides, this model also analyzes the relationships between knowledge characteristics and IKCB. Regression results for this model are shown in table 5-25. R = 0.849, R square = 0.720 and adjusted R square = 0.716. This adjusted R square shows that 71.6% change in IKCB can be observed because of the predictors of model 2. $P = 0.000 < .05$ which shows that this model is statistically significant. Table 5-25b (Appendix G) shows the individual effect of each predictor on IKCB in model 2. Info_Proc ($p = 0.045 < .05$), Prob_Sol ($p = 0.040 < .05$), Skill_Variety ($p = 0.000 < .05$) and

Specialization ($p = 0.007<.05$) are statistically significant predictors of model 2. Job_Complexity ($p = 0.782>.-5$) and inter_peou_pu_jc ($p = 0.955>.05$) are statistically not significant predictors of model 2.

Moderating effect of PEOU and PU on the relationships between job complexity, information processing and IKCB are presented in table 5-25c (Appendix G) and analyzed through model 3. Besides, this model and table also covers the relationships between knowledge characteristics and IKCB. Results for multiple regression analysis are shown in table 5-25. R = 0.854, R square = 0.730 and adjusted R square = 0.724 which shows that 72.4% variance in IKCB can be observed because of the predictors of model 3. P value for this model is $0.000<.05$ thus showing that model 3 is statistically significant. Individual effect of each predictor on IKCB is shown in table 5-25c (Appendix G). P values for Job_Complexity, Info_Proc, Skill_Variety, Specialization, inter_peou_pu_jc and inter_peou_pu_ip are 0.024, 0.005, 0.000, 0.007, 0.004 and 0.001 respectively. All the variables with the above mentioned p values are statistically significant because all these p values are less than 0.05 significance level. The only predictor which is statistically not significant in this model is Prob_Sol. P value for this predictor is 0.083 which is more than 0.05 significance level.

Table 5-25d (Appendix G) presents model 4 which is about the relationships between knowledge characteristics and IKCB. This model also analyzes the moderating effect of PEOU and PU on the relationships between job complexity, information processing, problem solving and IKCB. Regression results for this model are shown in table 5-25. R = 0.854, R square = 0.730 and adjusted R square = 0.724. This shows that 72.4% variance in IKCB can be predicted by the predictors of model 4. Value of p for this model is 0.000 which is less than 0.05 thus making it a statistically significant model. Individual effect of each predictor of model 4 on IKCB is shown in table 5-25d (Appendix G). Statistically significant predictors based on p value (where $p<.05$) includes, Job_Complexity, Skill_Variety, Specialization and inter_peou_pu_jc whereas statistically non-significant predictors (where $p>.05$) include Info_Proc, Prob_Sol, inter_peou_pu_ip and inter_peou_pu_ps.

Table 5-25e (Appendix G) presents model 5. This model is about the relationships between knowledge characteristics and IKCB. In addition, this model also analyzes the moderating effect of PEOU and PU on the relationships between job complexity, information processing, problem solving, skill variety and IKCB. Table 5-25 shows the results for multiple regression analysis for this model. Based on this analysis, R = 0.854, R square = 0.730 and adjusted R square = 0.723 which means that 72.3% variance in IKCB can be predicted because of the predictors of model 5. P = 0.000<.05 for this model which shows the statistical significance of the model. Job_Complexity (p = 0.024<.05), Specialization (p = 0.007<.05) and inter_peou_pu_jc (p = 0.004<.05) are statistically significant predictors of model 5. Statistically not significant predictors of model 5 are Info_Proc (p = 0.387>.05), Prob_Sol (p = 0.448>.05), Skill_Variety (p = 0.078>.05), inter_peou_pu_ip (p = 0.929>.05) and inter_peou_pu_sv (p = 0.772>.05).

Model 6 is about the moderating effect of PEOU and PU on the relationships between knowledge characteristics and IKCB besides analyzing the relationships between knowledge characteristics and IKCB. Table 5-25 shows the regression results for this model. Based on these results, R = 0.854, R square = 0.730 and adjusted R square = 0.722 which means that 72.2% change in IKCB can be observed based on the predictors of model 6. P value for this model is 0.000<.05 thus showing that model 6 is statistically significant. Table 5-25f (Appendix G) presents the results for the individual effect of each predictor of model 6 on IKCB. Based on p value criteria for statistical significance (p<.05) and insignificance (p>.05), Job_Complexity (p = 0.024), inter_peou_pu_jc (p = 0.004<.05) are the only two predictors whch are statistically significant. Other variables Info_Proc (p = 0.283), Prob_Sol (p = 0.376), Skill_Variety (p = 0.055), Specialization (p = 0.639), inter_peou_pu_ip (p = 0.719), inter_peou_pu_ps (p = 0.813), inter_peou_pu_sv (p = 0.560) and inter_peou_pu_spec (p = 0.445) are statistically not significant.

**PART III - Social Characteristics and KSB**

## 5.26 Relationship between Social Characteristics, PEOU and EKDB

**Predictors**

- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-25: Components of Models 1-5 between Social characteristics, PEOU and EKDB

Figure 5-25 presents the components of models 1-5 from table 5-26. These components include social characteristics (independent variable), PEOU (moderating variable) and EKDB (dependent variable).

Table 5-26 shows the results for hierarchical multiple regression analysis. Model 1 is about the relationships between social characteristics and EKDB. Value of R for this model is 0.851, R square = 0.725 and adjusted R square = 0.722 which shows that 72.2% variance in EKDB can be predicted by independent variables of model 1. P value for this model is 0.000, which is less than 0.05 thus showing that model 1 is statistically significant.

Table 5-26: Models between Social Characteristics, PEOU and EKDB

| **Model Summary** | | | | | | | | | | **AVOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.725 | 0.722 | 0.540 | 0.725 | 236.111 | 5 | 359 | 0.000 | 0.000 |
| 2 | .855[b] | 0.732 | 0.728 | 0.534 | 0.007 | 9.566 | 1 | 358 | 0.002 | 0.000 |
| 3 | .857[c] | 0.735 | 0.730 | 0.532 | 0.003 | 3.755 | 1 | 357 | 0.053 | 0.000 |
| 4 | .858[d] | 0.736 | 0.730 | 0.532 | 0.001 | 1.307 | 1 | 356 | 0.254 | 0.000 |
| 5 | .859[e] | 0.737 | 0.731 | 0.531 | 0.002 | 2.305 | 1 | 355 | 0.130 | 0.000 |

a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou

b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss

c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter

d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter

e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter, inter_peou_feebck_othrs

Table 5-26 presents model 1 results. Individual effect of each predictor of model 1 on EKDB is shown in table 5-26a (Appendix H). Based on p values, Social_Support ($p = 0.044 < .05$), Initial_Inter ($p = 0.000 < .05$), Rec_Inter ($p = 0.000 < .05$) and Feedbck_from_Others ($p = 0.001 < .05$) are all statistically significant predictors for EKDB in model 1.

Moderating effect of PEOU on the relationship between social support and EKDB is presented in table 5-26b (Appendix H). Besides, relationships between social characteristics and EKDB are also shown in this table. Regression results for this model (presented through table 5-26b: Appendix H) are shown in table 5-26. Value of R = 0.855, R square = 0.732 and adjusted R square = 0.728 which shows that 72.8% change in EKDB can be observed because of predictors of model 2. P = 0.000<.05 for this model which shows the statistical significance of the model. Individual effect of each predictor of model 2 on EKDB is shown in table 5-26b (Appendix H). Social_Support (p = 0.009), Initial_Inter (p = 0.000), Rec_Inter (p = 0.000), Feedbck_from_Others (p = 0.001) and inter_peou_ss (p = 0.002) are statistically significant predictors as all these p values are less than 0.05 significance level.

Results of model 3 from table 5-26 is presented through table 5-26c (Appendix H). This model is about the moderating effect of PEOU on the relationships between social support, initiated interdependence and EKDB. In addition, this model also analyzes the relationships between social characteristics and EKDB. Regression results for model 3 are shown in table 5-26. Value of R for this model is 0.857, R square = 0.735 and adjusted R square = 0.30. This adjusted R square value shows that 73% variance in EKDB can be presented through the predictors of model 3. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Table 5-26c (Appendix H) shows the individual effect of each predictor of model 3 on EKDB. P value for Initial_Inter, Rec_Inter and Feedbck_from_Others are 0.001, 0.000 and 0.001 respectively. These p values are less than 0.05 thus showing that predictors with these p values are statistically significant. P values for statistically non-significant predictors (p>.05) Social_Support, inter_peou_ss and inter_peou_ini_inter are 0.464, 0.107 and 0.053 respectively.

Table 5-26d (Appendix H) is about the moderating effect of PEOU on the relationships between social support, initiated interdependence, received interdependence and EKDB. This table also presents the results of relationships between social characteristics and EKDB. Results for regression analysis for this model are shown in table 5-26. R = 0.858, R square = 0.736 and adjusted R square 0.730 which means that 73% variance in EKDB in model 4 can be observed because of the predictors of model 4. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of model 4. Individual effect of each predictor of model 4 on EKDB is shown in table 5-26d (Appendix H). Initial_Inter (p = 0.015<.05), Rec_Inter (p = 0.019<.05), Feedbck_from_Others (p = 0.002<.05) and inter_peou_ss (p = 0.049<.05) are all statistically significant predictors. Social_Support (p = 0.233>.05), inter_peou_ini_inter (p = 0.223>.05) and inter_peou_rec_inter (p = 0.254>.05) are statistically not significant in this model.

Model 5 in table 5-26 is about the moderating effect of PEOU on all the relationships between social characteristics and EKDB besides the relationships between social characteristics and EKDB. This model's results are presented through table 5-26e (Appendix H). Regression results for model 5 are shown in table

5-26. Value of R for this model is 0.859, R square = 0.737 and adjusted R square = 0.731 which means that 73.1% variance in EKDB in model 5 can be observed because of the predictors of this model. P = 0.000<.05 for model 5 which shows the statistical significance of the model. Each predictor's individual effect on EKDB is shown in table 5-26e (Appendix H). Initial_Inter (p = 0.005<.05) and Rec_Inter (p = 0.009<.05) are the only two predictors statistically significant in this model. All other predictors are statistically not significant.

### 5.27 Relationship between Social Characteristics, PEOU and EKCB

**Predictors**
- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**
- Perceived Ease of Use (PEOU)

**Dependent**
- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-26: Components of Models 1-5 between Social characteristics, PEOU and EKCB

Components of models 1-5 from table 5-27 are shown in figure 5-26. These models are based on the relationships between social characteristics (predictors), PEOU (moderating variable) and EKCB (observed variable). Results for hierarchical multiple regression analysis are shown in table 5-27.

Model 1 from table 5-27 is about the relationships between social characteristics and EKCB. Regression results for this model are shown in table 5-27. Value of R = 0.843, R square = 0.711 and adjusted R square = 0.708 which means that 70.8% variance in EKCB can be observed because of the predictors of model 1. P = 0.000<.05 for this model which shows the statistical significance of model 1.

Table 5-27: Models between Social Characteristics, PEOU and EKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .843[a] | 0.711 | 0.708 | 0.555 | 0.711 | 221.181 | 5 | 359 | 0.000 | 0.000 |
| 2 | .848[b] | 0.719 | 0.715 | 0.548 | 0.008 | 9.922 | 1 | 358 | 0.002 | 0.000 |
| 3 | .851[c] | 0.723 | 0.719 | 0.544 | 0.004 | 5.499 | 1 | 357 | 0.020 | 0.000 |
| 4 | .851[d] | 0.725 | 0.719 | 0.544 | 0.001 | 1.525 | 1 | 356 | 0.218 | 0.000 |
| 5 | .851[e] | 0.725 | 0.719 | 0.544 | 0.000 | 0.541 | 1 | 355 | 0.463 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, inter_peou_ss, inter_peou_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter, inter_peou_feebck_othrs | | | | | | | | | | |

Model 1 results are presented through table 5-27. Individual effect of each predictor of model 1 on EKCB is shown in table 5-27a (Appendix H). Based on p values, Social_Support (p = 0.011), Initial_Inter (p = 0.001), Rec_Inter (p = 0.000) and Feedbck_from_Others (p = 0.005) are all statistically significant predictors as p value for every predictor is less than 0.05 significance level.

Model 2 is about the moderating effect of PEOU on the relationship between social support and EKCB besides analyzing the relationships between social characteristics and EKCB. This model is presented through table 5-27b (Appendix H) and regression results are shown in table 5-27. R = 0.848, R square = 0.719 and adjusted R square = 0.715. This adjusted R square value shows that 71.5% change in EKCB can be observed by the predictors of model 2. P value for this model is 0.000<.05 thus showing the statistical significance of model 2. Table 5-27b (Appendix H) shows the individual effect of each predictor of model 2 on EKCB. Social_Support (p = 0.002<.05), Initial_Inter (p = 0.001<.05), Rec_Inter (p = 0.000<.05), Feedbck_from_Others (p = 0.008<.05) and inter_peou_ss (p = 0.002<.05) are all statistically significant predictors of model 2.

Table 5-27c (Appendix H: model 3) is about the moderating effect of PEOU on the relationships between social support, initiated interdependence and EKCB. Besides, model also analyzes the relationships between social characteristics and EKCB. Regression results for this model are shown in table 5-27. Value of R for this model is 0.851, R square = 0.723 and adjusted R square = 0.719 which means that 71.9% change in EKCB can be observed because of the predictors in model 3. P value for this model is 0.000 which is less than 0.05 this showing the statistical significance of the model. Individual effect of each predictor of model 3 on EKCB is shown in table 5-27c (Appendix H). Initial_Inter, Rec_Inter, Feedbck_from_Others, inter_peou_ss and inter_peou_ini_inter are all statistically significant predictors with p values 0.001, 0.000, 0.011, 0.045 and 0.020 respectively. The only predictor which is statistically not significant is Socual_Support whose p value = 0.373>.05.

Moderating effect of PEOU on the relationships between social support, initiated interdependence, received interdependence and EKCB is analyzed in model 4 and presented through table 5-27d (Appendix H). Besides, model 4 also analyzes the relationships between social characteristics and EKCB. Regression results for this model are shown in table 5-27. R = 0.851, R square = 0.725 and adjusted R square = 0.719 which means that 71.9% variance in EKCB can be observed because of the predictors in model 4. P = 0.000<.05 for this model which shows the statistical significance of the model. Individual effect of each predictor on EKCB is shown in table 5-27d (Appendix H). Based on p value, Initial_Inter (p = 0.009<.05), Rec_Inter (p = 0.015<.05), Feedbck_from_Others (p = 0.016<.05) and inter_peou_ss (p = 0.019<.05) are all statistically significant predictors. Similarly, based on p value, Social_Support (p = 0.169>.05), inter_peou_ini_inter (p = 0.123>.05) and inter_peou_rec_inter (p = 0.218>.05) are statistically not significant predictors.

Table 5-27e (Appendix H) presents results of model 5 from table 5-27 which is about the moderating effect of PEOU on all the relationships between all social characteristics and EKCB. In addition, this model also analyzes the relationships between social characteristics and EKCB. Results for regression analysis for this model are shown in table 5-27. R value = 0.851, R square = 0.725 and adjusted R square = 0.719 which means that 71.9% change in EKCB can be predicted by the predicting variables of model 5. P value for this model is 0.000<.05 thus shows the statistical significance of the model. Table 5-27e (Appendix H) shows the individual effect of each predictor of model 5 on EKCB. P values for statistically significant predictors (p<.05) Initial_Inter, Rec_Inter and inter_peou_ss are 0.007, 0.011 and 0.048 respectively. P values for statistically not significant (p>.05) variables Social_Support, Feedbck_from_Others, inter_peou_ini_inter, inter_peou_rec_inter and inter_peou_feebck_others are 0.268, 0.852, 0.088, 0.174 and 0.463.

### 5.28 Relationship between Social Characteristics, PEOU and IKDB

**Predictors**
- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**
- Perceived Ease of Use (PEOU)

**Dependent**
- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-27: Components of Models 1-5 between Social characteristics, PEOU and IKDB

Figure 5-27 presents the components of models 1-5. Hierarchical multiple regression analysis for these models are shown in table 5-28. Components for these models include social characteristics (predicting variables), PEOU (moderating variable) and IKDB (dependent variable).

Model 1 from table 5-28 is about the relationships between social characteristics and IKDB. Regression results for this model are as follows: R = 0.845, R square = 0.713 and adjusted R square = 0.710 which means that 71% variance in IKDB can be predicted from predictors of model 1. P = 0.000 for this model which is less than 0.05 thus showing the statistical significance of the model.

Table 5-28: Models between Social Characteristics, PEOU and IKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .845[a] | 0.713 | 0.710 | 0.560 | 0.713 | 223.303 | 5 | 359 | 0.000 | 0.000 |
| 2 | .852[b] | 0.725 | 0.721 | 0.549 | 0.012 | 15.347 | 1 | 358 | 0.000 | 0.000 |
| 3 | .854[c] | 0.729 | 0.724 | 0.546 | 0.004 | 5.083 | 1 | 357 | 0.025 | 0.000 |
| 4 | .854[d] | 0.729 | 0.724 | 0.546 | 0.000 | 0.248 | 1 | 356 | 0.619 | 0.000 |
| 5 | .855[e] | 0.731 | 0.725 | 0.546 | 0.002 | 1.981 | 1 | 355 | 0.160 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter, inter_peou_feebck_othrs | | | | | | | | | | |

Table 5-28 presents the variables and relationships among those variables. Individual effect of these variables on IKDB in model 1 are shown in table 5-28a (Appendix H). Social_Support ($p = 0.022<.05$), Initial_Inter ($p = 0.003<.05$), Rec_Inter ($p = 0.000<.05$) and Feedbck_from_Others ($p = 0.000<.05$) are all statistically significant predictors of IKDB in model 1.

Model 2 is about the moderating effect of PEOU on the relationship between social support and IKDB. Besides, this model also analyzes the relationships between social characteristics and IKDB. This model's results are presented through table 5-28b (Appendix H) and regression results are shown in table 5-28. R = 0.852, R square = 0.725 and adjusted R square = 0.721. This adjusted R square value shows that 72.1% variance in IKDB can be predicted through predictors of model 2. P = 0.000<.05 for this model which shows the statistical significance of the model. Table 5-28b (Appendix H) shows the individual effect of each predictor of model 2 on IKDB. Social_Support (p = 0.002), Initial_Inter (p = 0.001), Rec_Inter (p = 0.000), Feedbck_from_Others (p = 0.001) and inter_peou_ss (p = 0.000) are all statistically significant predictors of model 2 because of the p values which are less than 0.05.

Table 5-28c (Appendix H) presents model 3 from table 5-28. This model is about the relationships between social characteristics and IKDB. In addition, this table also shows the moderating relationship of POEU between social support, initiated interdependence and IKDB. Results for multiple regression for this model are shown in table 5-28. Value of R = 0.854, R square = 0.729 and adjusted R square = 0.724 which means that 72.4% change in IKDB can be observed because of the predictors of model 3. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Individual effect of each predictor of model 3 on IKDB is shown in table 5-28c (Appendix H). P value for Initial_Inter, Rec_Inter, Feedbck_from_Others and inter_peou_ini_inter are 0.001, 0.000, 0.001 and 0.025 respectively. All these p values are less than 0.05 therefore the predictors with these p values are statistically significant. Social_Support and inter_peou_ss are statistically insignificance as the p values for these two variables are higher than 0.05 significance level.

Moderating effect of PEOU on the relationships between social support, initiated interdependence, received interdependence and IKDB are presented through table 5-28d (Appendix H). Besides, this table also shows the relationships between social characteristics and IKDB. Regression results for this model are shown in table 5-28. R = 0.854, R square = 0.729 and adjusted R square = 0.724 which means that 72.4% variance in IKDB can be predicted by predictors of model 4. P = 0.000<.05 for this model which shows the statistical significance of the model. Individual effect of each predictor on IKDB in model 4 is shown in table 5-28d (Appendix H). Initial_Inter (p = 0.006<.05) and Feedbck_from_Others (p = 0.001<.05) are statistically significant predictors in this model whereas all other predictors are statistically not significant (because p>.05).

Model 5 is about the relationships between social characteristics and IKDB. Besides, this model also analyzes the moderating effect of PEOU on the relationships between all social characteristics and IKDB. Results are presented in table 5-28e (Appendix H). Results for regression analysis for this model are shown in table 5-28. R = 0.855, R square = 0.731 and adjusted R square = 0.725. This adjusted R square shows that 72.5% change in IKDB can be observed because of the predictors in model

5. P = 0.000<.05 for this model which shows the statistical significance of model 5. Table 5-28e (Appendix H) shows the individual effect of each predictor on IKDB in model 5. Statistically significant predictors include Initial_Inter (p = 0.002<.05) and inter_peou_ini_inter (p = 0.028<.05). All other predictors are statistically not significant.

### 5.29 Relationship between Social Characteristics, PEOU and IKCB

**Predictors**

- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-28: Components of Models 1-5 between Social characteristics, PEOU and IKCB

Components for models 1-5 are presented in figure 5-28. These include social characteristics (independent variables), PEOU (moderating variable) and IKCB (dependent variable). Results for hierarchical multiple regression analysis for these models are shown in table 5-29.

Model 1 analyzes the relationships between social characteristics and IKCB. R value for this model is 0.844, R square = 0.713 and adjusted R square = 0.710. This adjusted R square value shows that 71% variance in IKCB can be predicted because of predictors of model 1. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model.

Table 5-29: Models between Social Characteristics, PEOU and IKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .844[a] | 0.713 | 0.710 | 0.553 | 0.713 | 222.679 | 5 | 359 | 0.000 | 0.000 |
| 2 | .852[b] | 0.726 | 0.722 | 0.541 | 0.013 | 16.880 | 1 | 358 | 0.000 | 0.000 |
| 3 | .855[c] | 0.730 | 0.726 | 0.538 | 0.005 | 6.146 | 1 | 357 | 0.014 | 0.000 |
| 4 | .855[d] | 0.731 | 0.726 | 0.538 | 0.001 | 0.804 | 1 | 356 | 0.370 | 0.000 |
| 5 | .855[e] | 0.731 | 0.725 | 0.538 | 0.000 | 0.618 | 1 | 355 | 0.432 | 0.000 |

a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou

b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss

c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter

d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter

e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, inter_peou_ss, inter_peou_ini_inter, inter_peou_rec_inter, inter_peou_feebck_othrs

Model 1 results are presented through table 5-29. Individual effect of predictors in model are shown in table 5-29a (Appendix H). Based on the p value for every predictor, Social_Support, Initial_Inter, Rec_Inter and Feedbck_from_Others are all statistically significant ($p<.05$) predictors. P values for these predictors are 0.007, 0.000, 0.000 and 0.014 respectively.

Model 2 is presented through table 5-29b (Appendix H). This model analyzes the relationships between social characteristics and IKCB besides analyzing the moderating effect of PEOU on the relationship between social support and IKCB. Regression results for this model are shown in table 5-29. R value = 0.852, R square = 0.726 and adjusted R square = 0.722 which means that 72.2% variance in IKCB in can be observed because of predictors in model 2. P value for this model is 0.000 which is less than 0.05 this showing the statistical significance of the model. Table 5-29b (Appendix H) shows the individual effect of each predictor in model 2 on IKCB. Social_Support ($p = 0.000<.05$), Initial_Inter ($p = 0.000<.05$), Rec_Inter ($p = 0.000<.05$), Feedbck_from_Others ($p = 0.025<.05$) and inter_peou_ss ($p = 0.000<.05$) are all statistically significant predictors because of the p values.

Table 5-29c (Appendix H) is about the moderating effect of PEOU on the relationships between social support, initiated interdependence and IKCB. Besides, model 3 in table 5-29c (Appendix H) also analyzes the relationships between social characteristics and IKCB. Regression results for this model are shown in table 5-29. R = 0.855, R square = 0.730 and adjusted R square = 0.726 which means that 72.6% variance in IKCB can be observed because of the predicting variables of model 3. P = 0.000 for this model which is less than 0.05 thus showing the statistical significance of the model. Individual effect of each predictor in model 3 on IKCB is shown in table 5-29c (Appendix H). Based on the p value, Initial_Inter (p = 0.000), Rec_Inter (p = 0.001), Feedbck_frm_Others (p = 0.030), inter_peou_ss (p = 0.041) and inter_peou_ini_inter (p = 0.014) are all statistically significant (p<.05) predictors. The only predictor which is statistically not significant (p>.05) is Social_Support (p = 0.388).

Model 4 is about the relationships between social characteristics and IKCB besides analyzing the moderating effect of PEOU on the relationships between social characteristics, initiated interdependence, received interdependence and IKCB. This model is presented through table 5-29d (Appendix H) and the results for regression analysis are shown in table 5-29. Value of R for this model is 0.855, R square = 0.731 and adjusted R square = 0.726. This adjusted R square value shows that 72.6% change in IKCB can be observed due to the predictors in model 4. P value for this model is 0.000<.05 thus shows the statistical significance of the model. Each predictor's individual effect on IKCB is shown in table 5-29. Initial_Inter (p = 0.002<.05), Feedbck_from_Others (p = 0.040<.05) and inter_peou_ss (p = 0.028<.05) are statistically significant predictors. Statistically non-significant predictors include Social_Support (p = 0.235>.05), Rec_Inter (p = 0.050>=.05), inter_peou_ini_inter (p = 0.070>.05) and inter_peou_rec_inter (p = 0.370>.05).

Table 5-29e (Appendix H) presents model 5 which is about the relationships between social characteristics and IKCB. In addition, this model also analyzes the moderating effect of PEOU on the relationships between all social characteristics and IKCB. Table 5-29 shows the multiple regression results for this model. Based on regression results, R = 0.855, R square 0.731 and adjusted R square = 0.725. This adjusted R square value shows that 72.5% change in IKCB can be observed because of the predictors in model 5. P = 0.000<.05 for this model which shows that model is statistically significant. Table 5-29e (Appendix H) shows the results for the individual effect of predictors in model 5 on IKCB. Based on the p value of every predictor, Initial_Inter, Rec_Inter and inter_peou_ini_inter are statistically significant predictors with the following p values respectively: 0.001, 0.037 and 0.049. Social_Support, Feedbck_from_Others, inter_peou_ss, inter_peou_rec_inter and inter_peou_feebck_othrs have p values 0.360, 0.992, 0.069, 0.298 and 0.432 respectively. All these predictors are statistically not significant because they do not meet the criteria of p<.05.

### 5.30 Relationship between Social Characteristics, PU and EKDB

**Predictors**

- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-29: Components of Models 1-5 between Social characteristics, PU and EKDB

Components for models 1-5 are shown in figure 5-29. These models are about the relationships between social characteristics (predictors), PU (moderating variable) and EKDB (predicted variable). Hierarchical multiple regression results for these models are shown in table 5-30. Model 1 is about the relationships between social characteristics and EKDB. Regression results for this model are shown in table 5-30. R = 0.851, R square = 0.725 and adjusted R square = 0.722 which means that 72.2% variance in EKDB can be predicted because of model 1 predictors. P = 0.000 for this model which is less than 0.05 thus showing that model 1 is statistically significant.

Table 5-30: Models between Social Characteristics, PU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.725 | 0.722 | 0.540 | 0.725 | 236.111 | 5 | 359 | 0.000 | 0.000 |
| 2 | .892[b] | 0.796 | 0.793 | 0.466 | 0.071 | 124.606 | 1 | 358 | 0.000 | 0.000 |
| 3 | .893[c] | 0.797 | 0.794 | 0.465 | 0.001 | 2.623 | 1 | 357 | 0.106 | 0.000 |
| 4 | .893[d] | 0.797 | 0.793 | 0.465 | 0.000 | 0.516 | 1 | 356 | 0.473 | 0.000 |
| 5 | .893[e] | 0.798 | 0.793 | 0.466 | 0.000 | 0.474 | 1 | 355 | 0.492 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter, inter_pu_feedbck_othrs | | | | | | | | | | |

Model 1 is presented through table 5-30. Individual effect of each predictor of model 1 on EKDB is shown in table 5-30a (Appendix H). Social_Support (p = 0.044<.05), Initial_Inter (p = 0.000<.05), Rec_Inter (p = 0.000<.05) and Fedbck_from_Others (p = 0.001<.05) are all statistically significant predictors.

Table 5-30b (Appendix H) presents model 2 which is about the analysis of relationships between social characteristics and EKDB. Besides, this model also analyzes the moderating effect of PU on the relationship between social support and EKDB. Table 5-30 shows the results for multiple regression analysis for model 2. Value of R for this model is 0.892, R square = 0.796 and adjusted R square = 0.793 which means that 79.3% variance in EKDB can be observed because of the predictors in model 2. Value of p = 0.000<.05 thus showing the statistical significance of the model. Table 5-30b (Appendix H) shows the individual effect of each predictor in model 2 on EKDB. Based on p value, Social_Support, Initial_Inter, Rec_Inter and inter_pu_ss are all statistically significant predictors because their p values are less than 0.05 significance level. The only statistically non-significant predictor in this model is Feedbck_from_Others whose p value is higher than 0.05 level.

Model 3 is about the moderating effect of PU on the relationships between social support, initiated interdependence and EKDB. In addition, this model also analyzes the relationships between social characteristics and EKDB. This model is presented through table 5-30c (Appendix H). Multiple regression results for this model are shown in table 5-30. R value = 0.893, R square = 0.797 and adjusted R square = 0.794 which means that 79.4% change in EKDB can be predicted because of predictors in model 3. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Table 5-30c (Appendix H) shows the results for the individual effect of each predictor on EKDB. Rec_Inter (p = 0.001<.05) is the only predictor in model 3 which is statistically significant. All other predictors are statistically not significant (p>.05).

Table 5-30d (Appendix H) presents model 4. This model analyzes the relationships between social characteristics and EKDB. Model 4 also analyzes the moderating effect of PU on the relationships between social support, initiated interdependence, received interdependence and EKDB. Multiple regression results for this model are shown in table 5-30. R = 0.893, R square = 0.797 and adjusted R square = 0.793. This adjusted R square value shows that 79.3% change in EKDB can be observed because of the predictors in model 4. P = 0.000 for this model which is less than 0.05 thus showing the statistical significance of the model. Individual effect of each predictor on EKDB in model 4 is shown in table 5-30d (Appendix H). Based on p value, all the predictors are statistically not significant as all the p values are greater than 0.05.

Analysis for the relationships between social characteristics and EKDB is shown in table 5-30 as model 5. Besides, moderating effect of PU on the relationships between social characteristics and EKDB are also analyzed in model 5 and presented through table 5-30. R = 0.893, R square = 0.798 and adjusted R square = 0.793 which shows that 79.3% change in EKDB can be predicted because of the predictors in model 5. P value for this model is 0.000<.05 thus shows the statistical significance of the model. Table 5-30e (Appendix H) shows the individual effect of predictors on EKDB. Based on p value, all the predictors in model 5 are statistically not significant because p value for every variable is more than 0.05 significance level.

## 5.31 Relationship between Social Characteristics, PU and EKCB

**Predictors**

- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-30: Components of Models 1-5 between Social characteristics, PU and EKCB

Components for models 1-5 are shown in figure 5-30. These components include social characteristics as independent variables, PU as moderating variable and EKCB as dependent variable. Table 5-31 shows the hierarchical multiple regression analysis for these models.

Results for multiple regression analysis for relationships between social characteristics and EKCB are shown in table 5-31 as model 1. Value of R for this model is 0.843, R square = 0.711 and adjusted R square = 0.708. This adjusted R square value shows that 70.8% variance in EKCB can be predicted because of predictors in model 1. P = 0.000<.05 for this model which shows the statistical significance of the model.

Table 5-31: Models between Social Characteristics, PU and EKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .843[a] | 0.711 | 0.708 | 0.555 | 0.711 | 221.181 | 5 | 359 | 0.000 | 0.000 |
| 2 | .885[b] | 0.783 | 0.780 | 0.482 | 0.072 | 117.949 | 1 | 358 | 0.000 | 0.000 |
| 3 | .885[c] | 0.784 | 0.780 | 0.481 | 0.001 | 1.904 | 1 | 357 | 0.169 | 0.000 |
| 4 | .886[d] | 0.785 | 0.780 | 0.481 | 0.001 | 1.044 | 1 | 356 | 0.308 | 0.000 |
| 5 | .886[e] | 0.785 | 0.781 | 0.481 | 0.001 | 1.228 | 1 | 355 | 0.269 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter, inter_pu_feedbck_othrs | | | | | | | | | | |

Table 5-31 presents model 1. Individual effect of each predictor of model 1 on EKCB is shown in table 5-31a (Appendix H). P value for Social_Support, Initial_Inter, Rec_Inter and Feedbck_from_Others are 0.011, 0.001, 0.000 and 0.005 respectively. All the p values are lower than 0.05 thus showing that these predictors are statistically significant in model 1 while predicting EKCB.

Model 2 is about analyzing the moderating effect of PU on the relationships between social support and EKCB. Besides, this model also analyzes the relationships between social characteristics and EKCB. This model is presented through table 5-31b (Appendix H). Results for multiple regression analysis are shown in table 5-31. R = 0.885, R square = 0.783 and adjusted R square = 0.780 which means that 78% variance in EKCB can be predicted by the predictors in model 2. P = 0.000<.05 for this model which shows the statistical significance of model 2. Individual effect of each predictor on EKCB in model 2 is shown in table 5-31b (Appendix H). P values for Social_Support, Initial_Inter, Rec_Inter and inter_pu_ss are 0.000, 0.020, 0.000 and 0.000 respectively. All these p values are less than 0.05 thus showing that the predictors with these p values are statistically significant. The only predictor which is statistically not significant is Feedbck_from_Others (p = 0.436>.05).

Moderating effect of PU on the relationships between social support, initiated interdependence and EKCB is analyzed in model 3 in table 5-31. In addition, this model also analyzes the relationship between social characteristics and EKCB. This model (model 3) is presented through table 5-31c (Appendix H). Value of R for this model = 0.885, R square = 0.784 and adjusted R square = 0.780. This adjusted R square value shows that 78% change or variance in EKCB can be observed because of predictors in model 3. P value for this model is 0.000 which is less than 0.05 thus showing that the model is statistically significant. Table 5-31c (Appendix H) shows the individual effect of each predictor in model 3 on EKCB. Based on p value, the only predictor which is statistically significant ($p<.05$) is Rec_Inter. All other predictors are statistically not significant ($p>.05$).

Table 5-31d (Appendix H) presents model 4 from table 5-31. This model is about analyzing the relationships between social characteristics and EKCB. In addition, this model also analyzes the moderating effect of PU on the relationships between social support, initiated interdependence, received interdependence and EKCB. Value of R = 0.886, R square = 0.785 and adjusted R square 0.780 which means that 78% variance in EKCB can be predicted because of predictors in model 4. This model is statistically significant as well because p value for the model is 0.000<.05. Table 5-31d (Appendix H) presents the individual effect of each predictor in model 4 on EKCB. Social_Support ($p = 0.980>.05$), Initial_Inter ($p = 0.690>.05$), Rec_Inter ($p = 0.993>.05$), Feedbck_from_Others ($p = 0.341>.05$), inter_pu_ss ($p = 0.769>.05$), inter_pu_ini_inter ($p = 0.316>.05$) and inter_pu_rec_inter ($p = 0.308>.05$) are all statistically not significant predictors based on their p values.

Moderating effect of PU on the relationships between social characteristics and EKCB are shown in table 5-31e (Appendix H). This table also presents the relationships between social characteristics and EKCB. Table 5-31e (Appendix H) presents model 5 from table 5-31. Regression results for this model are shown in table 5-31. Value of R for this mode = 0.886, R square = 0.785 and adjusted R square = 0.781. This adjusted R square value shows that 78.1% variance/change in EKCB can be observed due to the predictors in model 5. P = 0.000<.05 for model 5 which shows the statistical significance of this model. Each predictor's individual effect on EKCB in shown in table 5-31e (Appendix H). All the predictors are statistically not significant (p>.05) in this model while predicting EKCB.

### 5.32 Relationship between Social Characteristics, PU and IKDB

**Predictors**

- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-31: Components of Models 1-5 between Social characteristics, PU and IKDB

Figure 5-31 presents the components for model 1-5. These models show various relationships between social characteristics (independent variable), PU (moderating variable) and IKDB (dependent variable). Hierarchical multiple regression analysis for these models are shown in table 5-32.

Model 1 is about the relationships between social characteristics and IKDB. Regression results for this model are shown in table 5-32. R = 0.845, R square = 0.713 and adjusted R square = 0.710 which shows that 71% variance in IKDB can be predicted because of predictors in model 1. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model.

Table 5-32: Models between Social Characteristics, PU and IKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .845[a] | 0.713 | 0.710 | 0.560 | 0.713 | 223.303 | 5 | 359 | 0.000 | 0.000 |
| 2 | .883[b] | 0.780 | 0.777 | 0.491 | 0.066 | 107.698 | 1 | 358 | 0.000 | 0.000 |
| 3 | .884[c] | 0.781 | 0.777 | 0.491 | 0.001 | 1.710 | 1 | 357 | 0.192 | 0.000 |
| 4 | .884[d] | 0.781 | 0.777 | 0.491 | 0.000 | 0.328 | 1 | 356 | 0.567 | 0.000 |
| 5 | .884[e] | 0.782 | 0.777 | 0.491 | 0.001 | 1.426 | 1 | 355 | 0.233 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter, inter_pu_feedbck_othrs | | | | | | | | | | |

Table 5-32 presents model 1. Individual effect of each predictor of this model on IKDB is shown in table 5-32a (Appendix H). Social_Support (p = 0.022<.05), Initial_Inter (p = 0.003<.05), Rec_Inter (p = 0.000<.05) and Feedbck_from_Others (p = 0.000<.05) are all statistically significant predictors in this model. These predictors are statistically significant because of the p values they have which are less than 0.05 significance level.

Moderating effect of PU on the relationship between social support and IKDB is analyzed in model 2 and shown in table 5-32b (Appendix H). This model also analyzes the relationships between social characteristics and IKDB. Regression results for this model are shown in table 5-32. Value of R = 0.883, R square = 0.780 and adjusted R square = 0.777 which shows that 77.7% variance in IKDB can be predicted by the predictors in model 2. P value for this model is 0.000 which shows the statistical significance of the model. Individual effect of each predictor in model 2 on IKDB is shown in table 5-32b (Appendix H). Social_Supoort (p = 0.000<.05), Initial_Inter (p = 0.045<.-5), Rec_Inter (p = 0.000<.05) and inter_pu_ss (p = 0.000<.05) are statistically significant predictors based on the p value they possess.

The only predictor which is statistically not significant in this model is

Feedbck_from_Others (p = 0.078>.05).

Model 3 is about analyzing the relationships between social characteristics and IKDB besides analyzing the moderating effect of PU on the relationships between social support, initiated interdependence and IKDB. This model is presented through table 5-32c (Appendix H). Value of R for this model is 0.884, R square = 0.781 and adjusted R square = 0.777. This adjusted R square shows that 77.7% change in IKDB can be predicted by predictors in model 3. P = 0.000<.05 for this model which shows the statistical significance of the model. Table 5-32c (Appendix H) shows the individual effect of each predictor on IKDB. Based on p value, Rec_Inter (p = 0.001<.05) is the only statistically significant predictors. All other predictors namely Social_Support (p = 0.482>.05), Initial_Inter (p = 0.481>.05), Feedbck_from_Others (p = 0.062>.05), inter_pu_ss (p = 0.331>.05) and inter_pu_ini_inter (p = 0.192>.05) are statistically not significant.

Table 5-32d (Appendix H) presents model 4. This model is about the analysis of moderating effect of PU on the relationships between social support, initiated interdependence, received interdependence and IKDB. In addition, this model also analyzes the relationships between social characteristics and IKDB. Table 5-32 shows the multiple regression results for this model. Based on regression analysis, R = 0.884, R square = 0.781 and adjusted R square = 0.777. This shows that 77.7% change in IKDB can be predicted through predictors of in model 4. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Table 5-32d (Appendix H) shows the results for the effect of each predictor on IKDB. P values for Social_Support, Initial_Inter, Rec_Inter, Feedbck_from_Others, inter_pu_ss, inter_pu_ini_inter and inter_pu_rec_inter are 0.774, 0.595, 0.709, 0.058, 0.612, 0.285 and 0.567 respectively. All these p values are higher than 0.05 thus showing that the predictors with these p values are statistically not significant.

Model 5 analyzes the relationships between social characteristics and IKDB. This model also analyzes the moderating effect of PU on the relationships between all social characteristics and IKDB. Model 5 is presented through table 5-32e (Appendix H). Multiple regression results are shown in table 5-32. Based on regression analysis, R = 0.884, R square = 0.782 and adjusted R square = 0.777. This adjusted R square shows that 77.7% change in IKDB can be observed based on the predictors in model 5. Value of p for model 5 is 0.000 which is less than 0.05 thus showing that this model is statistically significant. Individual effect of each predictor in model 5 on IKDB is shown in table 5-32e (Appendix H). Social_Support (p = 0.940), Initial_Inter (p = 0.917), Rec_Inter (p = 0.436), Feedbck_from_Others (p = 0.514), inter_pu_ss (p = 0.799), inter_pu_ini_inter (p = 0.520), inter_pu_rec_inter (p = 0.925) and inter_pu_feedbck_othrs (p = 0.233) are all statistically not significant because of the p value they possess. P value for every predictor is higher than 0.05 significance level.

### 5.33 Relationship between Social Characteristics, PU and IKCB

**Predictors**

- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-32: Components of Models 1-5 between Social characteristics, PU and IKCB

Components for models 1-5 are shown in figure 5-32. These models analyze the relationships between social characteristics (independent variables), PU (moderating variable) and IKCB (dependent variable). Hierarchical multiple regression analysis is performed on these models and the regression results are shown in table 5-33.

Model 1 is about the relationships between social characteristics and IKCB. Value of R for this model is 0.844, R square = 0.713 and adjusted R square = 0.719 which shows that 71% variance in IKCB can be predicted because of the predictors in model 1. P = 0.00 for this model which is less than 0.05 thus shows the statistical significance of the model.

Table 5-33: Models between Social Characteristics, PU and IKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .844[a] | 0.713 | 0.710 | 0.553 | 0.713 | 222.679 | 5 | 359 | 0.000 | 0.000 |
| 2 | .885[b] | 0.784 | 0.781 | 0.481 | 0.071 | 117.681 | 1 | 358 | 0.000 | 0.000 |
| 3 | .886[c] | 0.784 | 0.781 | 0.481 | 0.000 | 0.709 | 1 | 357 | 0.400 | 0.000 |
| 4 | .886[d] | 0.786 | 0.781 | 0.480 | 0.001 | 2.386 | 1 | 356 | 0.123 | 0.000 |
| 5 | .886[e] | 0.786 | 0.781 | 0.481 | 0.000 | 0.032 | 1 | 355 | 0.859 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, pu, inter_pu_ss, inter_pu_ini_inter, inter_pu_rec_inter, inter_pu_feedbck_othrs | | | | | | | | | | |

Table 5-33 presents model 1 which is about analyzing the relationships between social characteristics and IKCB. Table 5-33a (Appendix H) presents the results for the individual effect of each predictor on IKCB in model 1. Based on p value for every predictor, Social_Support ($p = 0.007 < .05$), Initial_Inter ($p = 0.000 < .05$), Rec_Inter ($p = 0.000 < .05$) and Feedbck_from_Others ($p = 0.014 < .05$) are all statistically significant.

Model 2 is presented through table 5-33b (Appendix H). This model analyzes the relationships between social characteristics and IKCB besides analyzing the moderating effect of PU on the relationships between social support and IKCB. Regression results for this model are shown in table 5-33. R = 0.885, R square = 0.784 and adjusted R square = 0.781 which means that 78.1% variance in IKCB can be observed because of the predictors in model 2. Value of $p = 0.000 < .05$ for this model which shows that model is statistically significant. Individual effect of each predictor in model 2 on IKCB is shown in table 5-33b (Appendix H). P values for Social_Supoort, initial_Inter, Rec_Inter and inter_pu_ss are 0.000, 0.002, 0.001 and 0.000 respectively. All the variables with these p values are statistically significant as these p values are less than 0.05. Feedbck_from_Others is statistically not significant as $p = 0.698 > .05$ for this predictor.

Table 5-33c (Appendix H) presents model 3 which analyzes the moderating effect of PU on the relationships between social support, initiated interdependence and IKCB. In addition, this model also analyzes the relationships between social characteristics and IKCB. Value of R for this model from table 5-33 is 0.886, R square = 0.784 and adjusted R square = 0.781. This value of adjusted R square shows that 78.1% change in IKCB can be observed because of the predictors in model 3. P value for model 3 is $0.000 < .05$ thus showing the statistical significance of the model. Table 5-33c (Appendix H) shows the results for the individual effect of each predictor on IKCB in model 3. Based on p value, Rec_Inter ($p = 0.002 < .05$) is the only statistically significant predictor. Remaining all variables/predictors are statistically not significant.

Moderating effect of PU on the relationships between social characteristics, initiated interdependence, received interdependence and IKCB is analyzed in model 4 which is presented through table 5-33d (Appendix H). This model also analyzes the relationships between social characteristics and IKCB. Regression results for model 4 are shown in table 5-33d (Appendix H). R value = 0.886, R square = 0.786 and adjusted R square 0.781 which shows that 78.1% variance in IKCB can be predicted by predictors in model 4. $P = 0.000 < .05$ for this model which shows the statistical significance of the model. Table 5-33d (Appendix H) shows the individual effect of each predictor on IKCB in model 4. All the predictors of IKCB in model 3 are statistically not significant based on their p values.

Analysis for the relationships between social characteristics and IKCB is shown in model 5 of table 5-33. This model also analyzes the moderating effect of PU on the relationship between social characteristics and IKCB. Results for regression analysis for this model are shown in table 5-33. R = 0.886, R square = 0.786 and adjusted R square = 0.781. This adjusted R square value shows that 78.1% variance in IKCB can be observed due to the predictors in model 5. Value of p for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Table 5-33e (Appendix H) shows the results for the individual effect of each predictor on IKCB in model 5. Social_Support (p = 0.925), Initial_Inter (p = 0.638), Rec_Inter (p = 0.615), Feedbck_from_Others (p = 0.977), inter_pu_ss (p = 0.687), inter_pu_ini_inter (p = 0.795), inter_pu_rec_inter (p = 0.172) and inter_pu_feedbck_othrs (p = 0.859) are all statistically not significant because of the p values which are all more than 0.05 significance level.

### 5.34 Relationship between Social Characteristics, PEOU, PU and EKDB

**Predictors**
- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**
- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**
- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-33: Components of Models 1-5 between Social characteristics, PEOU, PU and EKDB

Components for models 1-5 are presented in figure 5-33. These components include social characteristics (predictors), POU and PU (moderating variable) and KDB (observed variable). Hierarchical multiple regression analysis was performed on these models and results are shown in table 5-34.

Model 1 is about the relationships between social characteristics and EKDB. Multiple regression results for this model are shown in table 5-34. Based on regression results, R = 0.851, R square 0.725 and adjusted R square = 0.722. This shows that 72.2% variance in EKDB can be observed because of predictors in model 1. Value of p for this model is 0.000 which is less than 0.05 thus showing the statistically significance of the model.

Table 5-34: Models between Social Characteristics, PEOU, PU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .851[a] | 0.725 | 0.722 | 0.540 | 0.725 | 236.111 | 6 | 359 | 0.000 | 0.000 |
| 2 | .852[b] | 0.725 | 0.721 | 0.540 | 0.001 | 0.782 | 1 | 358 | 0.377 | 0.000 |
| 3 | .852[c] | 0.727 | 0.722 | 0.540 | 0.001 | 1.801 | 1 | 357 | 0.180 | 0.000 |
| 4 | .853[d] | 0.727 | 0.722 | 0.540 | 0.000 | 0.420 | 1 | 356 | 0.517 | 0.000 |
| 5 | .854[e] | 0.729 | 0.722 | 0.539 | 0.002 | 2.139 | 1 | 355 | 0.144 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter, inter_peou_pu_feedbck_othrs | | | | | | | | | | |

Table 5-34 presents model 1. This table shows the relationship between social characteristics and EKDB. Table 5-34a (Appendix H) shows the results for the effect of each predictor in model 1 on EKDB. Based on p value, Social_Supoort (p = 0.044<.05), Initial_Inter (p = 0.000<.05), Rec_Inter (p = 0.000<.05) and feedbck_from_Others (p = 0.001<.05) are statistically significant predictors in model 1. There is no statistically non-significant predictor in this model.

Model 2 is about the moderating effect of PEOU and PU on the relationship between social support and EKDB. Besides, this model also analyzes the relationships between social characteristics and EKDB. Table 5-34b (Appendix H) presents this model 2. Multiple regression results are shown in table 5-34. R = 0.852, R square = 0.752 and adjusted R square = 0.721 which means that 72.1% change in EKDB in model 2 can be observed because of the predictors in this model. Value of p for this model is 0.000<.05 thus shows the statistical significance of model 2. Effect of each predictor individually on EKDB is shown in table 5-34b (Appendix H). Based on p value, Social_Support, Initial_Inter, Rec_Inter and Feedbck_from_Others are statistically significant predictors. P values for these predictors are 0.032<.05, 0.000<.05, 0.000<.05 and 0.001<.05. inter_peou_pu_ss is the only statistically non-significant predictor with p value 0.377>.05.

Table 5-34c (Appendix H) presents model 3 which is about analyzing the relationships between social characteristics and EKDB. In addition, this model also analyzes the moderating effect of PEOU and PU on the relationships between social support, initiated interdependence and EKDB. Result for multiple regression analysis for this model is shown in table 5-34. Value of R = 0.852, R square = 0.727 and adjusted R square = 0.722. This adjusted R square value shows that 72.2% change in EKDB can be observed because of the predictors in model 1. P = 0.000 for this model which is less than 0.05 statistical significance level thus shows the statistical significance of the model. Table 5-34c (Appendix H) shows the individual predictor's effect on EKDB. Initial_Inter (p = 0.005<.05), Rec_Inter (p = 0.000<.05) and Feedback_from_Others (p = 0.001<.05) are statistically significant predictors. Whereas Social_Supoort (p = 0.838>.05), inter_peou_pu_ss (p = 0.210>.05) and inter_peou_pu_ini_inter (p = 0.180>.05) are statistically not significant.

Moderating effects of PEOU and PU on the relationships between social support, initiated interdependence, received interdependence and EKDB are analyzes in model 4 which is presented through table 5-34d (Appendix H). This model also analyzes the relationships between social characteristics and EKDB. Value of R for this model is 0.853, R square = 0.727 and adjusted R square = 0.722. This adjusted R square value shows that 72.2% change in EKDB can be observed because of the predictors in model 4. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Table 5-34d (Appendix H) shows the effect of each predictor separately on EKDB. Based on p value, Initial_Inter, Rec_Inter and Feedbck_from_Others are statistically significant predictors. p values for these variables are 0.015, 0.024 and 0.001 respectively. P values for statistically not significant predictors Social_Support, inter_peou_pu_ss, inter_peou_pu_ini_inter and inter_peou_pu_rec_ini are 0.620, 0.162, 0.341 and 0.517 respectively.

Table 5-34e (Appendix H) presents model 5 from table 5-34. This model is about the analysis of relationships between social characteristics and EKDB. Besides, this model is also about the analysis of the moderating effect of PEOU and PU on the relationships between social characteristics and EKDB. Table 5-34 shows the results for multiple regression analysis for this model. Based on regression analysis, R = 0.854, R square = 0.729 and adjusted R square = 0.722 which shows that 72.2% change in EKDB can be observed because of the predictors in model 5. Value of p for this model is 0.000<.05 thus showing the statistical significance of the model. Effect of each predictor individually on EKDB is shown in table 5-34e (Appendix H). Predictors which are statistically significant include Initial_Inter (p = 0.006) and Rec_Inter (p = 0.009). These two predictors are statistically significant because their p values are less than 0.05. All other predictors are statistically not significant.

## 5.35 Relationship between Social Characteristics, PEOU, PU and EKCB

**Predictors**

- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-34: Components of Models 1-5 between Social characteristics, PEOU, PU and EKCB

Figure 5-34 presents the components for models 1-5 from table 5-35. These models analyze the relationships between social characteristics (independent variables), PEOU and PU (moderating variables) and EKCB (dependent variable). Hierarchical multiple regression analysis test was conducted to see the relationships between above mentioned variables. Regression results are shown in table 5-35.

Relationships between social characteristics and EKCB are analyzed in model 1. Regression results for this model shows that R = 0.843, R square = 0.711 and adjusted

R square = 0.708 which means that 70.8% variance in EKCB can be predicted by predictors in model 1. P value for this model is 0.000 which is less than 0.05 thus sowing the statistical significance of the model.

Table 5-35: Models between Social Characteristics, PEOU, PU and EKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .843[a] | 0.711 | 0.708 | 0.555 | 0.711 | 221.181 | 6 | 359 | 0.000 | 0.000 |
| 2 | .844[b] | 0.712 | 0.708 | 0.555 | 0.001 | 0.991 | 1 | 358 | 0.320 | 0.000 |
| 3 | .846[c] | 0.715 | 0.710 | 0.553 | 0.003 | 3.486 | 1 | 357 | 0.063 | 0.000 |
| 4 | .846[d] | 0.715 | 0.710 | 0.553 | 0.000 | 0.409 | 1 | 356 | 0.523 | 0.000 |
| 5 | .846[e] | 0.716 | 0.710 | 0.553 | 0.001 | 0.932 | 1 | 355 | 0.335 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter, inter_peou_pu_feedbck_othrs | | | | | | | | | | |

Model 1 values are shown in table 5-35. Table 5-35a (Appendix H) shows the results for the effect of each predictor individually on EKCB. Social_Support (p = 0.011<.05), Initial_Inter (p = 0.001<.05), Rec_Inter (p = 0.000<.05) and Feedbck_from_Others (p = 0.005<.05) are all statistically significant predictors because of the p values they have.

Model 2 from table 5-35 is about the moderating effects of PEOU and PU on the relationship between social support and EKCB. Besides, this model also analyzes the relationships between social characteristics and EKCB. This model is presented through table 5-35b (Appendix H). Regression results for this model are shown in table 5-35b (Appendix H). Value of R = 0.844, R square = 0.712 and adjusted R square = 0.708. This adjusted R square value shows that 70.8% change in EKCB can be observed because of the predictors in model 2. Statistical significance of the model can be seen from the p value which is less than 0.05 (p = 0.000) thus showing that model is statistically significant. Table 5-35b (Appendix H) shows the individual effect of each predictor on IKCB in model 2. P values for Social_Support, Initial_Inter, Rec_Inter and Feedbck_from_Others are 0.007, 0.001, 0.000 and 0.005 respectively. All the variables with these p values are statistically significant ($p<.05$). Only predictor which is statistically not significant is inter_peou_pu_ss ($p = 0.320>.05$).

Table 5-35c (Appendix H) presents model 3 which is about analyzing the relationships between social characteristics and EKCB. In addition, this model also analyzes the moderating effects of PEOU and PU on the relationships between social characteristics, initiated interdependence and EKCB. Multiple regression results for this model are shown in table 5-35. Based on regression analysis, $R = 0.846$, R square = 0.715 and adjusted R square = 0.710. This shows that 71% variance in EKCB can be predicted due to predictors in model 3. Value of p for this model is $0.000<.05$ thus shows that model is statistically significant. Each predictor's individual effect on EKCB is shown in table 5-35c (Appendix H). Initial_Inter ($p = 0.002<.05$), Rec_Inter ($p = 0.000<.05$) and Feedbck_from_Others ($p = 0.008<.05$) are statistically significant predictors. Social_Support ($p = 0.675>.05$), inter_peou_pu_ss ($p = 0.078>.05$) and inter_peou_pu_ini_inter ($p = 0.063>.05$) are statistically not significant predictors in model 3.

Relationships between social characteristics and EKCB are analysed in model 4. This model also analyzes the moderating effect of PEOU and PU on the relationships between social support, initiated interdependence, received interdependence and EKCB. Model 4 is presented through table 5-35. Regression results for this model are shown in table 5-35. Value of R for this model is 0.0846, R square = 0.715 and adjusted R square = 0.710. This adjusted R square value shows that 71% change in EKCB can be observed because of the predictors of EKCB in model 4. $P = 0.000<.05$ for this model which shows the statistical significance of the model. Table 5-35d (Appendix H) shows the individual predictor's effect on EKCB. In this model, statistically significant predictors include Initial_Inter ($p = 0.006$), Rec_Inter ($p = 0.022$) and Feedbck_from_Others ($p = 0.009$). These predictors are statistically significant because $p<.05$ for these variables. On the other hand, statistically non-significant predictors include Social_Support ($p = 0.498$), inter_peou_pu_ss (p =

0.069), inter_peou_pu_ini_inter (p = 0.152) and inter_peou_pu_rec_inter (p = 0.523). These predictors are statistically not significant because p>.05 for these variables.

Moderating effects of PEOU and PU are analysed on the relationships between social characteristics and EKCB. Besides, this model which is presented through table 5-35, also analyzes the relationships between social characteristics and EKCB. Multiple regression results for this model are shown in table 5-35. Based on this regression analysis, R = 0.846, R square = 0.716 and adjusted R square = 0.710. This shows that 71% change/variance in EKCB can be observed/predicted by predictors in model 5. P = 0.000<.05 for this model which shows that model 5 is statistically significant. Table 5-35e (Appendix H) shows the individual predictor's effect on EKCB in model 5. P values for Initial_Inter and Rec_Inter are 0.004 and 0.014 respectively. Both these predictors statistically significant in this model because the p values they have are less than 0.05 significance level. All other predictors in model 5 are statistically not significant because p>.05 for these predictors.

### 5.36 Relationship between Social Characteristics, PEOU, PU and IKDB

**Predictors**
- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**
- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**
- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-35: Components of Models 1-5 between Social characteristics, PEOU, PU and IKDB

Components for models 1-5 are presented in figure 5-35. These models consist of various relationships between social characteristics (independent variable), PEOU and

PU (moderating variables) and IKDB (dependent variable). Hierarchical multiple regression analysis was performed to get regression results for these models. Table 5-36 shows the regression results for models 1-5.

Model 1 is about the relationships between social characteristics and IKDB. Based on regression results in table 5-36, R = 0.845, R square = 0.713 and adjusted R square = 0.710. This adjusted R square value shows that 71% variance in IKDB can be predicted by the predictors in model 1. P = 0.000 for this model which is less than 0.05 thus shows the statistical significance of the model.

Table 5-36: Models between Social Characteristics, PEOU, PU and IKDB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .845[a] | 0.713 | 0.710 | 0.560 | 0.713 | 223.303 | 6 | 359 | 0.000 | 0.000 |
| 2 | .846[b] | 0.716 | 0.712 | 0.558 | 0.003 | 3.416 | 1 | 358 | 0.065 | 0.000 |
| 3 | .848[c] | 0.718 | 0.714 | 0.556 | 0.002 | 3.125 | 1 | 357 | 0.078 | 0.000 |
| 4 | .848[d] | 0.719 | 0.713 | 0.557 | 0.000 | 0.063 | 1 | 356 | 0.801 | 0.000 |
| 5 | .849[e] | 0.720 | 0.714 | 0.556 | 0.002 | 2.041 | 1 | 355 | 0.154 | 0.000 |
| a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu | | | | | | | | | | |
| b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss | | | | | | | | | | |
| c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter | | | | | | | | | | |
| d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter | | | | | | | | | | |
| e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter, inter_peou_pu_feedbck_othrs | | | | | | | | | | |

Model 1 is presented through table 5-36. This model is about the relationships between social characteristics and IKDB. Table 5-36a (Appendix H) shows the results for the individual effect of each predictor on IKDB in model 1. Based on p value, Social_Support (p = 0.022<.05), Initial_Inter (p = 0.003<.05), Rec_Inter (p = 0.000<.05) and Feedbck_from_Others (p = 0.000<.05) are all statistically significant predictors in this model.

Table 5-36b (Appendix H) presents model 2 which is about the moderating effects of PEOU and PU on the relationships between social support and IKDB. Besides, this model also analyzes the relationships between social characteristics and IKDB. Multiple regression results for model 2 are shown in table 5-36. R = 0.846, R square = 0.716 and adjusted R square = 0.712. This adjusted R square shows that 71.2% variance in IKDB can be predicted because of the predictors in model 2. P = 0.000 for this model which is less than 0.05 thus showing the statistical significance of the model. Individual effect of each predictor on IKDB is shown in table 5-36b (Appendix H). P values for Social_Supoort, Initial_Inter, Rec_Inter and Feedbck_from_Others are 0.009, 0.002, 0.000 and 0.000 respectively. All the predictors with these p values are statistically significant because these p values are less than 0.05. The only predictor which is statistically not significant is inter_peou_pu_ss because p = 0.065>.05 for this predictor.

Model 3 analyzes the relationships between social characteristics and IKDB. In addition, this model also analyzes the moderating effects of PEOU and PU on the relationships between social support, initiated interdependence and IKDB. This model is presented through table 5-36c (Appendix H). Results for the relationships through regression analysis are shown in table 5-36. Value of R = 0.848, R square = 0.718 and adjusted R square = 0.714. This adjusted R square value shows that 71.4% change in IKDB can be observed due to the predictors in model 3. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Table 5-36c (Appendix H) shows the effect of each predictor on IKDB. Initial_Inter (p = 0.003), Rec_Inter (p = 0.000) and Feedbck_from_Others (p = 0.000) are statistically significant predictors because p<.05 for the variables. Social_Support (p = 0.717), inter_peou_pu_ss (p = 0.113) and inter_peou_pu_ini_inter (p = 0.078) are statistically not significant due to p>.05.

Moderating effects of PEOU and PU on the relationships between social support, initiated interdependence, received interdependence and IKDB are shown through table 5-36d (Appendix H) and analyzed in model 4. Besides, this table and model also shows and analyzes the relationships between social characteristics and IKDB respectively. Regression results for this model are shown in table 5-36. R = 0.848, R square = 0.719 and adjusted R square = 0.713 which means that 71.3% variance in IKDB can be observed due to predictors in model 4. P value for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Each predictor's individual effect on IKDB is shown in table 5-36d (Appendix H). Except from Initial_Inter (p = 0.007<.05) and Feedbck_from_Others (p = 0.001<.05), all other variables are statistically not significant (p>.05).

Relationships between social characteristics and IKDB are shown through table 5-36e (Appendix H). Additionally, this table also presents the moderating effects of PEOU and PU on the relationships between social characteristics and IKDB. These relationships are analyzed in model 5 and results are shown in table 5-36. Value of R for this model is 0.849, R square = 0.720 and adjusted R square = 0.714 which means that 71.4% change in IKDB can be observed because of the predictors of IKDB in model 5. Value of p = 0.000<.05 for this model which shows the statistical significance. Individual predictor's effect on IKDB in model 5 is shown in table 5-36e (Appendix H). Initial_Inter (p = 0.003<.05) and Rec_Inter (p = 0.028<.05) are the only two statistically significant predictors in this model. All other predictors are statistically not significant.

### 5.37 Relationship between Social Characteristics, PEOU, PU and IKCB

**Predictors**
- Social Support
- Initiated Interdependence
- Received Interdependence
- Feedback from Others

**Moderator**
- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**
- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-36: Components of Models 1-5 between Social characteristics, PEOU, PU and IKCB

Models 1-5 presented in table 5-37 include the analysis of relationships between social characteristics (independent variable), PEOU and PU (moderating variables) and IKCB (dependent variable). Hierarchical multiple regression analysis was performed on these models and the results are shown in table 5-37.

Model 1 in table 5-37 is about the relationships between social characteristics and IKCB. Value of R for this model is 0.844, R square = 0.713 and adjusted R square = 0.710 which shows that 71% variance in IKCB can be observed because of the predictors in mode 1. P = 0.000 for this model which is less than 0.05 significance level thus showing the statistical significance of the model.

Table 5-37: Models between Social Characteristics, PEOU, PU and IKCB

| **Model Summary** | | | | | | | | | | **ANOVA** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .844[a] | 0.713 | 0.710 | 0.553 | 0.713 | 222.679 | 6 | 359 | 0.000 | 0.000 |
| 2 | .846[b] | 0.716 | 0.712 | 0.551 | 0.003 | 3.680 | 1 | 358 | 0.056 | 0.000 |
| 3 | .848[c] | 0.719 | 0.715 | 0.548 | 0.004 | 4.650 | 1 | 357 | 0.032 | 0.000 |
| 4 | .848[d] | 0.719 | 0.714 | 0.549 | 0.000 | 0.016 | 1 | 356 | 0.900 | 0.000 |
| 5 | .848[e] | 0.720 | 0.713 | 0.550 | 0.000 | 0.263 | 1 | 355 | 0.609 | 0.000 |

a. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu

b. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss

c. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter

d. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter

e. Predictors: (Constant), Feedbck_from_Others, Rec_Inter, Social_Support, Initial_Inter, peou, pu, inter_peou_pu_ss, inter_peou_pu_ini_inter, inter_peou_pu_rec_inter, inter_peou_pu_feedbck_othrs

Model 1 is presented through table 5-37. Individual effect of each predictor in model 1 on IKCB is shown in table 5-37a (Appendix H). P values for Social_Support, Initial_Inter, Rec_Inter and Feedbck_from_Others are 0.007, 0.000, 0.000 and 0.014 respectively. All these p values are less than 0.05 therefore showing that variables with these P values are statistically significant.

Table 5-37b (Appendix H) presents model 2 from table 5-37. This model is about the relationships between social characteristics and IKCB besides analyzing the moderating effects of PEOU and PU on the relationships between social support and IKCB. Regression results for this model are shown in table 5-37. R = 0.846, R square = 0.716 and adjusted R square = 0.712. This adjusted R square shows that 71.2% variance in IKCB can be predicted because of the predictors in model 2. Value of p for this model is 0.000<.05 thus shows that model 2 is statistically significant. Effect of each predictor individually on IKCB in model 2 is shown in table 5-37b (Appendix H). Social_Support (p = 0.003<.05), Initial_inter (p = 0.000<.05), Rec_Inter (p = 0.000<.05) and Feedbck_from_Others (p = 0.015<.05) are all statistically significant predictors. The only statistically non-significant predictor is inter_peou_pu_ss (p = 0.056>.05).

Model 3 from table 5-37 is about analyzing the moderating effects of PEOU and PU on the relationships between social support, initiated interdependence and IKCB. Besides, this model also analyzes the relationships between social characteristics and IKCB. This model (model 3) is presented through table 5-37c (Appendix H). Multiple regression analysis results are shown in table 5-37. Value of R for this model is 0.848, R square = 0.719 and adjusted R square = 0.715 which means that 71.5% variance or change in IKCB can be observed because of the predictors of IKCB in model 3. Model 3 is also statistically significant as p=0.000<.05. Table 5-37c (Appendix H) shows the effect of each predictor individually on IKCB. Based on p value, initial_Inter, Rec_Inter, Feedbck_from_Others and inter_peou_pu_ini_inter are all statistically significant predictors as the p values they have are less than 0.05. Social_Support and inter_peou_pu_ss are both statistically not significant (p>.05).

Table 5-37d (Appendix H) which presents model 4 shows the relationships between social characteristics and IKCB. In addition, this model also analyzes the moderating effects of PEOU and PU on the relationships between social support, initiated interdependence, received interdependence and IKCB. Results for multiple regression for this model are shown in table 5-37. R = 0.848, R square = 0.719 and adjusted R square = 0.714. This adjusted R square value shows that 71.4% change in IKCB can be observed because of the predictors in model 4. P = 0.000<.05 for this model which is a sign of statistical significance of the model. Table 5-37d (Appendix H) shows the results for the individual effect of each predictor on IKCB in model 4. Initial_Inter (p = 0.000<.05), Feedbck_from_Others (p = 0.021<.05) and inter_peou_pu_ini_inter (p = 0.045<.05) are statistically significant predictors. Social_Support (p = 0.697>.05), Rec_Inter (p = 0.160>.05), inter_peou_pu_ss (p = 0.118>.05) and inter_peou_pu_rec_inter (p = 0.900>.05) are all statistically not significant.

Model 5 is about the analysis of moderating effects of PEOU and PU on the relationships between social characteristics and IKCB. Besides, this model which is presented through table 5-37e (Appendix H) also analyzes the relationships between social characteristics and IKCB. Value of R for this model is 0.848, R square = 0.720 and adjusted R square = 0.713 which shows that 71.3% change in IKCB can be observed due to predictors of IKCB in model 5. Value of p for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Effect of ach predictor in model 5 on IKCB is shown in table 5-37e (Appendix H). The only predictors which are statistically significant in this model are Initial_Inter (p = 0.000<.05) and inter_peou_pu_ini_inter (p = 0.040<.05). All other predictors in this model are statistically not significant (p>.05).

## PART IV - Contextual Characteristics and KSB

### 5.38 Relationship between Contextual Characteristics, PEOU and EKDB

**Predictors**
- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**
- Perceived Ease of Use (PEOU)

**Dependent**
- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-37: Components of Models 1-4 between Contextual characteristics, PEOU and EKDB

Models 1-4 show various hierarchical multiple regression analysis between various relationships. These relationships include contextual characteristics (predictors), PEOU (moderating variable) and EKDB (predicted variable). Results for hierarchical multiple regression analysis are shown in table 5-38.

Relationships between contextual characteristics and EKDB are analyzed in model 1. Regression results show that R = 0.836, R square = 0.699 and adjusted R square = 0.696. This adjusted R square value shows that 69.6% variance in EKCB can be predicted through contextual characteristics. P value for this model is 0.000 which is less than 0.05 thus showing the statistically significance of the model.

Table 5-38: Models between Contextual Characteristics, PEOU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .836[a] | 0.699 | 0.696 | 0.564 | 0.699 | 278.499 | 4 | 360 | 0.000 | 0.000 |
| 2 | .838[b] | 0.702 | 0.699 | 0.561 | 0.004 | 4.286 | 1 | 359 | 0.039 | 0.000 |
| 3 | .840[c] | 0.706 | 0.702 | 0.559 | 0.004 | 4.780 | 1 | 358 | 0.029 | 0.000 |
| 4 | .841[d] | 0.708 | 0.703 | 0.558 | 0.002 | 1.905 | 1 | 357 | 0.168 | 0.000 |
| a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou | | | | | | | | | | |
| b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd | | | | | | | | | | |
| c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc | | | | | | | | | | |
| d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc, inter_peou_sftwre_tools | | | | | | | | | | |

Table 5-38 presents model 1. Individual effect of each predictor in model 1 on EKDB is shown in table 5-38a (Appendix I). Work_Consitions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are statistically significant predictors whereas Physical_Demands (p = 0.979>.05) is statistically not significant. This statistical significance and insignificance is based on p value every variables has.

Model 2 is about the moderating effect of PEOU on the relationship between physical demands and EKDB. Besides, this model also analyzes the relationships between contextual characteristics and EKDB. This model is presented through table 5-38b (Appendix I). Based on regression results, R = 0.838, R square = 0.702 and adjusted R square = 0.699. This adjusted R square value shows that 69.9% variance in EKDB can be predicted because of predictors in model 2. P value for this mode is 0.000<.05 thus showing the statistical significance of the model. Table 5-38b (Appendix I) shows the individual effect of each predictor on EKDB. Work_Conditions (p = 0.000<.05), Software_Tools_Used (p = 0.000<.05) and inter_peou_pd (p = 0.039<.05) are statistically significant predictors in this model. Physicsal_Demands (p = 0.112>.05) is the only statistically non-significant variable. Statistical significance or insignificance is analyzed on the basis of p value.

Moderating effect of PEOU on the relationships between physical demands, work conditions and EKDB is shown in table 5-38b (Appendix I) an analyzed in table 5-38.

This table and model also shows and analyzes the relationships between contextual characteristics and EKDB. Results for multiple regression analysis are shown in table 5-38. R = 0.840, R square = 0.706 and adjusted r square = 0.702 which means that 70.2% change in EKDB can be observed in EKDB in model 3. Value of p for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Individual effect of each predictor on EKDB is shown in table 5-38. P values for Work_Conditions, Software_Tools_Used and inter_peou_wc are 0.000, 0.000 and 0.029 respectively. These p values are less than 0.05 thus shows that the variables with these p values are statistically significant. P values for Physical_Demands and inter_peou_pd are 0.976 and 0.636 respectively. Both these p values are higher than 0.05 thus showing the statistically insignificance of these variables.

Table 5-38d (Appendix I) shows relationships between contextual characteristics and EKDB besides showing the moderating effect of PEOU on the relationships between all contextual characteristics and EKDB. Regression results for this model are shown in table 5-38. Value of R = 0.841, R square = 0.708 and adjusted R square = 0.703. This adjusted R square value shows that 70.3% change in EKDB can be observed because of the predictors in EKDB. P = 0.000<.05 for this model which shows the statistical significance of the model. Table 5-38d (Appendix I) shows the results for the individual effect of each predictor on EKDB in model 4. Except Work_Conditions (p = 0.000<.05), all other predictors are statistically not significant because of the p values they have.

## 5.39 Relationship between Contextual Characteristics, PEOU and EKCB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-38: Components of Models 1-4 between Contextual characteristics, PEOU and EKCB

Components for the relationships between contextual characteristics and EKCN are shown in figure 5-38. These components include contextual characteristics (independent variable), PEOU (moderating variable) and EKCB (dependent variable). Hierarchical multiple regression analysis was performed on these relationships. Results for multiple regression are shown in table 5-39.

Model 1 in table 5-39 shows the analysis of relationships between contextual characteristics and EKCB. R value for this model is 0.833, R square = 0.694 and adjusted R square = 0.692. This adjusted R square value shows that 69.2% variance in EKCB can be observed because of the predictors in model 1. Value of p for this model is 0.000 which shows the statistical significance of the model as $p<.05$.

Table 5-39: Models between Contextual Characteristics, PEOU and EKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. Error of the Estimate | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .833[a] | 0.694 | 0.692 | 0.570 | 0.694 | 272.313 | 4 | 360 | 0.000 | 0.000 |
| 2 | .835[b] | 0.698 | 0.695 | 0.567 | 0.004 | 4.608 | 1 | 359 | 0.032 | 0.000 |
| 3 | .838[c] | 0.703 | 0.699 | 0.564 | 0.005 | 5.651 | 1 | 358 | 0.018 | 0.000 |
| 4 | .840[d] | 0.705 | 0.700 | 0.562 | 0.003 | 3.048 | 1 | 357 | 0.082 | 0.000 |

a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou

b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd

c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc

d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc, inter_peou_sftwre_tools

Table 5-39 presents model 1. Table 5-39a (Appendix I) shows the individual effect of each predictor in model 1 on EKCB. Work_Conditions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are the two predictors which are statistically significant whereas Physical_Demands (p = 0.775>.05) is statistically not significant. If p<.05 then the predictor is said to be statistically signified otherwise statistically non-significant.

Table 5-39b (Appendix I) presents model 2 which is about the relationships between contextual characteristics and EKCB. Besides, this model also analyzes the moderating effect of PEOU on the relationship between physical demands and EKCB. Regression results for this model are shown in table 5-39. R = 0.835, R square = 0.698 and adjusted R square = 0.695. This shows that 69.5% change in EKCB can be predicted due to predictors of EKCB in model 2. P value for this mode is 0.000<.05 thus showing the statistical significance of the model. Table 5-39b (Appendix I) shows the results for the individual effect of each predictor on EKCB. P value for statistically significant (p<.05) predictors Work_Conditions, Softwar_Tools_Used and inter_peou_pd are 0.000, 0.000 and 0.032 respectively. P value for statistically not significant (p>.05) predictor, Physical_Dmands is 0.069.

Model 3 is about the analysis of moderating effect of PEOU on the relationships between physical demands, work conditions and EKCB. In addition, this model also analyzes the relationships between contextual characteristics and EKCB. Value of R for this model is 0.838, R square = 0.703 and adjusted R square = 0.699 which shows that 69.9% variance in EKCB can be predicted because of the predictors in model 4. This model is statistically significant as well because p = 0.000<.05 for this model. Individual effect of each predictor on KCB is shown in table 5-39c (Appendix I). Statistically significant predictors include Work_Conditions (p = 0.000<.05), Software_Tools_Used (p = 0.000<.05) and inter_peou_wc (p = 0.018<.05). Physical_Demands (p = 0.968>.05) and inter_peou_pd (p = 0.564>.05) are statistically not significant predictors.

Moderating effect of PEOU on the relationships between all contextual characteristics and EKCB are analyzed in model 4 and presented through table 5-39d (Appendix I). Besides, this model and table also analyzes and presents the relationships between contextual characteristics and EKCB. Results for multiple regression for this model are shown in table 5-39. R = 0.840, R square = 0.705 and adjusted R square = 0.700. This adjusted R square value shows 70% variance prediction in EKCB due to model 4 predictors. P = 0.000<.05 for this model which shows statistical significance of the model. Table 5-39d (Appendix I) shows the results for the individual effect of each predictor on EKCB in model 4. The only predictors which are statistically significant includes Work_Conditions (p = 0.000<.05) and inter_peou_wc (p = 0.031<.05). All other predictors are statistically not significant (p>.05).

## 5.40 Relationship between Contextual Characteristics, PEOU and IKDB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-39: Components of Models 1-4 between Contextual characteristics, PEOU and IKDB

Figure 5-39 shows the components for the models 1-4 in table 5-40. These models consist of contextual characteristics (predictors), PEOU (moderating) and IKDB (predicted). Results for hierarchical multiple regression analysis for these models are shown in table 5-40.

Relationships between contextual characteristics and IKDB are analyzed in model 1. Value of R for this model is 0.839, R square = 0.704 and adjusted R square = 0.701 which shows that 70.1% change in IKDB can be predicted because of the predictors in model 1. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model.

Table 5-40: Models between Contextual Characteristics, PEOU and IKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .839[a] | 0.704 | 0.701 | 0.568 | 0.704 | 284.855 | 4 | 360 | 0.000 | 0.000 |
| 2 | .842[b] | 0.709 | 0.706 | 0.564 | 0.005 | 6.457 | 1 | 359 | 0.011 | 0.000 |
| 3 | .846[c] | 0.716 | 0.712 | 0.558 | 0.007 | 8.952 | 1 | 358 | 0.003 | 0.000 |
| 4 | .847[d] | 0.718 | 0.713 | 0.557 | 0.002 | 2.450 | 1 | 357 | 0.118 | 0.000 |
| a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou | | | | | | | | | | |
| b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd | | | | | | | | | | |
| c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc | | | | | | | | | | |
| d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc, inter_peou_sftwre_tools | | | | | | | | | | |

Table 5-40 presents model 1. Individual effect of each predictor in mode1 on IKDB is shown in table 5-40a (Appendix I). Based on p value criteria (p<.05), Work_Conditions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are statistically significant predictors. While Physical_Demands (p = 0.845) is statistically not significant (p>.05).

Model 2 analyzes the relationships between contextual characteristics and IKDB besides analyzing the moderating effect of PEOU on the relationships between physical demands and IKDB. This model is presented through table 5-40b (Appendix I). Multiple regression results for this model are shown in table 5-40. R = 0.842, R square = 0.709 and adjusted R square = 0.706. This adjusted R square value shows that 70.6% change in IKDB can be observed because of the predictors in model 2. This model is statistically significant as well as p = 0.000<.05. Table 5-40b (Appendix I) shows the individual effect of each predictor on IKDB in model 2. All the predictors, Physical_Demands (p = 0.040), Work_Conditions (p = 0.000), Software_Tools_Used (p = 0.000) and inter_peou_pd (p = 0.011) are statistically significant. All these predictors are statistically significant because their p values are less than 0.05 significance level criteria.

Table 5-40c (Appendix I) shows the moderating effect of PEOU on the relationships between physical demands, work conditions and IKDB. Additionally, this table also shows the relationships between contextual characteristics and IKDB. All these relationships are analyzed through multiple regression and results are shown in table 5-40. Value of R = 0.846, R square = 0.716 and adjusted R square = 0.712. This shows that 71.2% variance in IKDB can be predicted due to predictors in model 3. Value of p for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Table 5-40c (Appendix I) shows the results for the individual effect of each predictor in model 3. P value for Work_Conditions, Software_Tools_Used and inter_peou_wc are 0.000, 0.000 and 0.003 respectively. Predictors with these p values are statistically significant as these p value are less than 0.05. P values for Physical_Demands and inter_peou_pd are 0.899 and 0.414 respectively. Both these p values are more than 0.05 significance level therefore predictors with these p values are statistically not significant.

Moderating effect of PEOU on the relationships between all contextual characteristics and IKDB are shown in table 5-40d (Appendix I) and analyzed in model 4. Besides, this model and table also analyzes and presents the relationships between contextual characteristics and IKDB respectively. Results for multiple regression for this model are shown in table 5-40. R = 0.847, R square = 0.718 and adjusted R square = 0.713. This adjusted R square value shows that 71.3% change in IKDB can be observed because of the predictors of IKDB in model 4. P value for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Each predictor's individual effect on IKDB in model 4 is shown in table 5-40d (Appendix I). Work_Conditions ($p = 0.000 < .05$) and inter_peou_wc ($p = 0.036 < .05$) are the only two predictors with statistical significance. All other predictors are statistically not significant as they do not meet the criteria of $p < .05$.

### 5.41 Relationship between Contextual Characteristics, PEOU and IKCB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Ease of Use (PEOU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-40: Components of Models 1-4 between Contextual characteristics, PEOU and IKCB

Components for the models 1-4 are presented in figure 5-40. These components include contextual characteristics (independent variable), PEOU (moderating variable) and IKCB (dependent variable). Hierarchical multiple regression analysis was used to analyze the relationships between these components. Results for this analysis are shown in table 5-41.

Table 5-41 shows the multiple regression results for model 1. This model analyzes the relationships between contextual characteristics and IKCB. R value for this model is 0.837, R square = 0.701 and adjusted R square = 0.698. This shows that 69.8% variance in IKCB can be predicted due to predictors in model 1. P = 0.000<.05 thus shows the statistical significance of the model.

Table 5-41: Models between Contextual Characteristics, PEOU and IKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .837[a] | 0.701 | 0.698 | 0.564 | 0.701 | 280.690 | 3 | 360 | 0.000 | 0.000 |
| 2 | .840[b] | 0.706 | 0.702 | 0.560 | 0.005 | 6.369 | 1 | 359 | 0.012 | 0.000 |
| 3 | .844[c] | 0.713 | 0.709 | 0.554 | 0.007 | 8.952 | 1 | 358 | 0.003 | 0.000 |
| 4 | .845[d] | 0.714 | 0.710 | 0.553 | 0.002 | 1.973 | 1 | 357 | 0.161 | 0.000 |

a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou

b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd

c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc

d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, inter_peou_pd, inter_peou_wc, inter_peou_sftwre_tools

Table 5-41 presents model 1. Each predictor of model 1 has some effect on IKCB which is shown in table 5-41a (Appendix I). Work_Conditions ($p = 0.000<.05$) and Software_Tools_Used ($p = 0.000<.05$) have statistically significant effect on IKCB whereas Physical_Demands ($p = 0.624>.05$) have statistically no significant effect on IKCB in model 1.

Table 5-41b (Appendix I) presents model 2 which is about analyzing the relationships between contextual characteristics and IKCB. Additionally, this model and table also analyzes and presents respectively the moderating effect of PEOU on the relationship between physical demands and IKCB. Results for multiple regression for this model are shown in table 5-41. R = 0.840, R square = 0.706 and adjusted R square = 0.702 which shows that 70.2% variance in IKCB can be predicted by the predictors in model 2. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Table 5-41b (Appendix I) shows the individual effect of ach predictor in model 2 on IKCB. The only predictor which is statistically not significant ($p<.05$) is Phsical_Demands ($p = 0.109$). All other predictors are statistically significant ($p<.05$).

Model 3 is about analyzing the relationships between contextual characteristics and IKCB. Besides, this model also analyzes the moderating effect of PEOU on the relationships between physical demands, work conditions and IKCB. This model is presented through table 5-41c (Appendix I). R value for this model = 0.844, R square = 0.713 and adjusted R square = 0.709. This adjusted R square value shows that 70.9% change in IKCB can be observed because of predictors in model 3. P = 0.000<.05 for this model which means that model 3 is statistically significant. Table 5-41c (Appendix I) shows the individual predictor's effect on IKCB in model 3. Work_Conditions (p = 0.000<.05), Software_Tools_Used (p = 0.000<.05) and inter_peou_wc (p = 0.003<.05) are statistically significant predictors. Physical_Demands (p = 0.618>.05) and inter_peou_pd (p = 0.408>.05) are statistically not significant because of the p values they have.

Moderating effect of PEOU on the relationships between contextual characteristics and IKCB are shown in table 5-41d (Appendix I) and analyzed in model 4. Besides, this table and model also shows and analyzes the relationships between contextual characteristics and IKCB respectively. Multiple regression results for this model are shown in table 5-41. R = 0.845, R square = 0.714 and adjusted R square = 0.710 which means that 71% variance in IKCB can be predicted due to predictors in model 4. This model is statistically significant as well because p = 0.000<.05. Individual predictor's effect on IKCB is shown in table 5-41d (Appendix I). The only predictor which is statistically significant is Work_Conditions (p = 0.000<.05), all other predictors are statistically not significant (p value of every predictor is greater than 0.05 statistical significance level).

## 5.42 Relationship between Contextual Characteristics, PU and EKDB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-41: Components of Models 1-4 between Contextual characteristics, PU and EKDB

Components for models 1-4 are shown in figure 5-41. These components include contextual characteristics (independent variable), PU (moderating variable) and EKDB (dependent variable). Hierarchical multiple regression analysis was conducted on these models. Results for these models are shown in table 5-42.

Model 1 is about the relationships between contextual characteristics and EKDB. Value of R from multiple regression analysis for this model is 0.836, R square = 0.699 and adjusted R square = 0.696 which shows that 69.6% variance in EKDB can be observed because of predictors in model 1. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model.

Table 5-42: Models between Contextual Characteristics, PU and EKDB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .836[a] | 0.699 | 0.696 | 0.564 | 0.699 | 278.499 | 4 | 360 | 0.000 | 0.000 |
| 2 | .876[b] | 0.767 | 0.765 | 0.496 | 0.069 | 105.903 | 1 | 359 | 0.000 | 0.000 |
| 3 | .896[c] | 0.802 | 0.799 | 0.459 | 0.035 | 62.691 | 1 | 358 | 0.000 | 0.000 |
| 4 | .897[d] | 0.805 | 0.801 | 0.456 | 0.002 | 4.566 | 1 | 357 | 0.033 | 0.000 |

a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu

b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd

c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc

d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc, inter_pu_sftwr_tools

Table 5-42 presents model 1. Individual effect of each predictor on EKDB in model 1 is shown in table 5-42a (Appendix I). Work_Conditions (p = 0.000) and Software_Tools_Used (p = 0.000) are the two predictors in this model which are statistically significant. These two predictors are statistically significant because their p values are less than 0.05. Physical_Demands (p = 0.979) is the only statistically not significant predictor because p>.05 for this predictor.

Relationships between contextual characteristics and EKDB are presented in table 5-42b (Appendix I) and analyzed in model 2. Besides, moderating effect of PU on the relationship between physical demands and EKDB is also shown in table 5-42a (Appendix I) and analyzed in model 2. Value of R = 0.876, R square = 0.767 and adjusted R square = 0.765 which means that 76.5% change in EKDB can be observed by the predictors in model 2. P = 0.000<.05 thus showing that this model is statistically significant. Table 5-42b (Appendix I) shows the individual effect of each predictor on EKDB. Based on p value, all the predictors are statistically significant as their p values are 0.000<.05.

Table 5-42c (Appendix I) presents model 3 that is about the moderating effect of PU on the relationships between physical conditions, work conditions and EKDB. In addition, this table also shows the relationships between contextual characteristics and

EKDB. Multiple regression results for these relationships are shown in model 3 from table 5-42. R = 0.896, R square = 0.802 and adjusted R square = 0.799. This adjusted R square value shows that 79.9% variance in EKDB can be predicted due to predictors in model 3. Value of p for this model is 0.000, which means that this model is statistically significant. Each predictor's individual effect on EKDB is shown in table 5-42c (Appendix I). P values for Physical_Demands, Work_Conditions, Software_tools_Used, inter_pu_pd and inter_pu_wc are 0.000, 0.001, 0.012, 0.000 and 0.000. All these p values are less than 0.05 (significance level) therefore the predictors with these p values are statistically significant. None of the predictors is statistically non-significant (p>.05).

Relationships between contextual characteristics and EKDB are shown in table 5-42d (Appendix I) and analyzed in model 4 from table 5-42. Besides, moderating effect of PU on the relationships between contextual characteristics and EKDB are also shown in table 5-42d (Appendix I) and analyzed in model 4. Multiple regression results for this model are shown in table 5-42. Value of R = 0.897, R square = 0.805 and adjusted R square = 0.801 which means that 80.1% change in EKDB can be observed because of predictors in model 4. Value of p for this model is 0.000<.05 thus showing g that model is statistically significant. Individual effect of each predictor on EKDB is shown in table 5-42d (Appendix I). Physical_Demands (p = 0.000<.05), inter_pu_pd (p = 0.000<.05) and inter_pu_sftwr_tools (p = 0.033<.05) are statistically significant predictors. Work_Conditions (p = 0.713>.05), Software_Tools_Used (p = 0.180>.05) and inter_pu_wc (p = 0.622>.05) are statistically not significant predictors.

### 5.43 Relationship between Contextual Characteristics, PU and EKCB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-42: Components of Models 1-4 between Contextual characteristics, PU and EKCB

Figure 5-42 presents components for models 1-4. These components include contextual characteristics (predictor), PU (moderating variable) and EKCB (predicted variable). Hierarchical multiple regression analysis was performed on these models to analyze various relationships.

Model 1 from table 5-43 is about the relationships between contextual characteristics and EKCB. Value of R through multiple regression analysis for this model is 0.833, R square = 0.694 and adjusted R square = 0.692. This adjusted R square shows that 69.2% change in EKCB can be predicted because of predictors in model 1. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model.

Table 5-43: Models between Contextual Characteristics, PU and EKCB

| Model Summary | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .833[a] | 0.694 | 0.692 | 0.570 | 0.694 | 272.313 | 4 | 360 | 0.000 | 0.000 |
| 2 | .869[b] | 0.754 | 0.752 | 0.512 | 0.060 | 88.004 | 1 | 359 | 0.000 | 0.000 |
| 3 | .889[c] | 0.790 | 0.787 | 0.474 | 0.035 | 60.384 | 1 | 358 | 0.000 | 0.000 |
| 4 | .890[d] | 0.792 | 0.789 | 0.472 | 0.002 | 4.290 | 1 | 357 | 0.039 | 0.000 |
| a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu | | | | | | | | | | |
| b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd | | | | | | | | | | |
| c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc | | | | | | | | | | |
| d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc, inter_pu_sftwr_tools | | | | | | | | | | |

Table 5-43 presents model 1. This table shows the relationships between contextual characteristics and EKCB. Individual effect of each predictor of model 1 on EKCB is shown in table 5-43a (Appendix I). Work_Conditions (p = 0.000) and Software_Tools_Used (p = 0.000) are statistically significant predictors in this model whereas Physical_Demands (p = 0.775) is the only statistically non-significant predictor. Statistical significant and insignificance of predictors is calculated based on p value criteria which should be less than 0.05 for statistical significance otherwise any value of p>.05 will be considered statistically not significant.

Table 5-43b (Appendix I) shows the relationships between contextual characteristics and EKCB. Besides, this table also shows the relationship of PU as moderating variable between physical demands and EKCB. Multiple regression results for this model (model 2) are shown in table 5-43. R = 0.869, R square = 0.754 and adjusted R square = 0.752. This adjusted R square value shows that 75.2% variance in EKCB can be predicted due to predictors in model 2. P value for this model is 0.000<.05 thus shows the statistical significance of the model. Table 5-43b (Appendix I) shows the effect of individual predictor in model 2 on EKCB. Physical_Demands (p = 0.000<.05), Work_Conditions (p = 0.000<.05), Software_Tools_Used (p = 0.000<.05) and inter_pu_pd (p = 0.000<.05) are all statistically significant predictors based on the p values they possess.

Model 3 is about the moderating effect of PU on the relationships between physical demands, work conditions and EKCB. Additionally, this model also analyzes the relationships between contextual characteristics and EKCB. This model is presented through table 5-43c (Appendix I). Results for multiple regression analysis for this model are shown in table 5-43. Value of R = 0.889, R square = 0.790 and adjusted R square = 0.787 which means that 78.7% change in EKCB can be observed because of the predictors in model 3. P = 0.000<.05 for this model which shows that model is statistically significant. Individual effect of each predictor in model 3 on EKCB is shown in table 5-43c (Appendix I). P values for Physical_Demands, Work_Conditions, Software_Tools_Used, inter_pu_pd and inter_pu_wc are 0.000, 0.007, 0.034, 0.000 and 0.000 respectively. All these p values are less than 0.05, thus the predictors with these p values are statistically significant.

Table 5-43d (Appendix I) presents model 4. This model is about the moderating effect of PU on the relationships between contextual characteristics and EKCB. In addition, this model also analyzes the relationships between contextual characteristics and EKCB. Multiple regression results for this model are shown in table 5-43. R = 0.890, R square = 0.792 and adjusted R square = 0.789. This adjusted R square value shows that 78.9% change in EKCB can be observed due to predictors in model 4. P value for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model. Table 5-43d (Appendix I) shows the individual effect of each predictor of EKCB in model 4. Statistically significant (p<.05) predictors include Physical_Demands (p = 0.000), inter_pu_pd (p = 0.000) and inter_pu_sftwr_tools (p = 0.039) whereas statistically non-significant (p>.05) predictors include Work_Conditions (p = 0.574), Software_Tools_Used (p = 0.164) and inter_pu_wc (p = 0.612).

## 5.44 Relationship between Contextual Characteristics, PU and IKDB

**Predictors**
- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**
- Perceived Usefulness (PU)

**Dependent**
- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-43: Components of Models 1-4 between Contextual characteristics, PU and IKDB

Components for models 1-4 are presented in figure 5-43. These components include contextual characteristics (independent variable), PU (moderating variable) and IKDB (dependent variable). Hierarchical multiple regression analysis was conducted to analyze various relationships among these components. Results for these regression analysis are shown in table 5-44.

Relationships between contextual characteristics and IKDB are analyzed in model 1. Based on regression analysis, R = 0.839, R square = 0.704 and adjusted R square = 0.701. This shows that 70.1% variance in IKDB can be predicted due to predictors in model 1. Value of p for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model.

Table 5-44: Models between Contextual Characteristics, PU and IKDB

| Model Summary[e] | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .839[a] | 0.704 | 0.701 | 0.568 | 0.704 | 284.855 | 4 | 360 | 0.000 | 0.000 |
| 2 | .866[b] | 0.751 | 0.748 | 0.522 | 0.047 | 67.966 | 1 | 359 | 0.000 | 0.000 |
| 3 | .886[c] | 0.785 | 0.782 | 0.485 | 0.035 | 57.745 | 1 | 358 | 0.000 | 0.000 |
| 4 | .888[d] | 0.788 | 0.785 | 0.483 | 0.003 | 4.549 | 1 | 357 | 0.034 | 0.000 |
| a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu | | | | | | | | | | |
| b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd | | | | | | | | | | |
| c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc | | | | | | | | | | |
| d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc, inter_pu_sftwr_tools | | | | | | | | | | |

Model 1 values are presented through table 5-44. Each predictor's individual effect on IKDB is shown in table 5-44a (Appendix I). Work_Conditions (p = 0.000<.05), Software_Tools_Used (p = 0.000<.05) are two statistically significant predictors whereas Physical_Demands (p = 0.845>.05) is the only predictor with statistical insignificance.

Table 5-44b (Appendix I) presents model 2 which is about the relationships between contextual characteristics and IKDB. Besides, this model also analyzes the moderating effect of PU on the relationship between physical demands and IKDB. Multiple regression analysis results for this model are shown in table 5-44. R value = 0.866, R square = 0.751 and adjusted R square = 0.748 which means that 74.8% change in IKDB can be observed because of predictors in model 2. Value of p for this model is 0.000 which is less than 0.05 thus showing that model is statistically significant. Table 5-44b (Appendix I) shows the effect of each predictor on IKDB in model 2. Based on p value, all the predictors are statistically significant as their p values are less than 0.05 significance level criteria.

Model 3 analyzes the relationships between contextual characteristics and IKDB. In addition, this model also analyzes the moderating effect of PU on the relationships between physical demands, work conditions and IKDB. This model is presented through table 5-44c (Appendix I). Value of R for this model is 0.886, R square = 0.785 and adjusted R square = 0.782. This adjusted R square value shows that 78.2% variance in IKDB can be predicted due to predictors in model 3. P = 0.000 for this model which is less than 0.05 thus showing that model 3 is statistically significant. Individual effect of each predictor on IKDB is shown in table 5-44c (Appendix I). P values for Physical_Demands, Work_Conditions, Software_Tools_Used, inter_pu_pd and inter_pu_wc are 0.000, 0.034, 0.023, 0.000 and 0.000. All these p values are less than 0.05 thus showing that the predictors with these p values are statistically significant.

Moderating effect of PU on the relationships between contextual characteristics and IKDB is presented in table 5-44d (Appendix I) and analyzed in model 4. Besides, this model and table also analyzes and presents the relationships between contextual characteristics and IKDB respectively. Value of R for this model 0.888, R square = 0.788 and adjusted R square = 0.785. This adjusted R square value shows that 78.5% change in IKDB can be observed because of predictors in model 4. This model is statistically significant as well because p = 0.000<.05. Table 5-44d (Appendix I) shows the effect of each predictor in model 4 in IKDB. Physical_Demands (p = 0.003<.05), inter_pu_pd (p = 0.000<.05) and inter_pu_sftwr_tools (p = 0.034<.05) are statistically significant predictors. Work_Conditions (p = 0.380>.05), Software_Tools_Used (p = 0.160>.05) and inter_pu_wc (p = 0.693>.05) are statistically not significant predictors. Statistical significance and insignificance is based on the criteria of p value which should be less than 0.05 for the predictor to be statistically significant otherwise non-significant.

### 5.45 Relationship between Contextual Characteristics, PU and IKCB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-44: Components of Models 1-4 between Contextual characteristics, PU and IKCB

Figure 5-44 presents components for model 1-4 from table 5-46. These components include contextual characteristics (predictors), PU (moderating variables) and IKCB (predicted variable). Hierarchical multiple regression results were performed to analyzed the relationship various components of these models. Regression results for these models are shown in table 5-46.

Model 1 from table 5-45 analyzes the relationships between contextual characteristics and IKCB. Value of R for this model is 0.837, R square = 0.701 and adjusted R square = 0.698 which means that 69.8% variance in IKCB can be observed because of predictors in model 1. P value for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model.

Table 5-45: Models between Contextual Characteristics, PU and IKCB

| Model Summary[e] | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .837[a] | 0.701 | 0.698 | 0.564 | 0.701 | 280.690 | 4 | 360 | 0.000 | 0.000 |
| 2 | .870[b] | 0.757 | 0.754 | 0.509 | 0.056 | 83.292 | 1 | 359 | 0.000 | 0.000 |
| 3 | .888[c] | 0.788 | 0.785 | 0.476 | 0.031 | 52.110 | 1 | 358 | 0.000 | 0.000 |
| 4 | .889[d] | 0.791 | 0.787 | 0.473 | 0.003 | 5.334 | 1 | 357 | 0.021 | 0.000 |
| a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu | | | | | | | | | | |
| b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd | | | | | | | | | | |
| c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc | | | | | | | | | | |
| d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, pu, inter_pu_pd, inter_pu_wc, inter_pu_sftwr_tools | | | | | | | | | | |

Model 1 is presented through table 5-45. Individual effect of each predictor on IKCB in model 1 is shown in table 5-45a (Appendix I). Based on p value, Work_Conditions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are statistically significant predictors whereas Physical_Demands (p = 0.624>.05) is the only predictor wwith statistical insignificance.

Table 5-45b (Appendix I) presents model 2 which is about the moderating effect of PU on the relationship between physical demands and IKCB. Besides, this table also shows the relationships between contextual characteristics and IKCB. This table (5-45b: Appendix I) presents model 2. Value of R for this model is 0.870, R square = 0.757 and adjusted R square = 0.754 which means that 75.4% change in IKCB can be observed because of predictors in model 2. P = 0.000 for this model which shows that model is statistically significant a p<.05. Table 5-45b (Appendix I) shows the individual effect of each predictor in model 2 on IKCB. Physical_Demands (p = 0.000<.05), Work_Conditions (p = 0.000<.05), Software_Tools_Used (p = 0.001<.05) and inter_pu_pd (p = 0.000<.05) are all statistically significant predictors as their p values are less than 0.05.

Model 3 analyzes the relationships between contextual characteristics and IKDB besides analyzing the moderating effect of PU on the relationships between physical demands, work conditions and IKCB. This model is presented through table 5-45c (Appendix I). Multiple regression results for this model are shown in table 5-45. Based on regression results, R = 0.888, R square = 0.788 and adjusted R square = 0.785. This adjusted r square value shows that 78.5% variance in IKCB can be predicted due to predictors in model 3. Value of p for this model also shows that model is statistically significant as p = 0.000<.05. Table 5-45c (Appendix I) shows the individual effect of each predictor in model 3 on IKCB. P values for Physical_Demands, Work_Conditions, Software_Tools_Used, inter_pu_pd and inter_pu_wc are 0.000, 0.029, 0.039, 0.000 and 0.000 respectively. These p values suggest that all the predictors are statistically significant as all these p values are less than 0.05.

Moderating effect of PU on the relationships between contextual characteristics and IKCB is analyzed in model 4. In addition, this model also analyzes the relationships between contextual characteristics and IKCB. This model is presented through table 5-45d (Appendix I). Multiple regression results for this model are shown in table 5-45. Value of R for this model is 0.889, R square = 0.791 and adjusted R square = 0.787 which means that 78.7% change in IKCB can be observed because of predictors of IKCB in model 4. Value of p for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Table 5-45d (Appendix I) shows the effect of each predictor in model 4 on IKCB. Statistically significant predictors include Physical_Demands (p = 0.000), inter_pu_pd (p = 0.000) and inter_pu_sftwr_tools (p = 0.021) whereas statistically non-significant predictors include Work_Conditions (p = 0.315), Software_Tools_Used (p = 0.102) and inter_pu_wc (p = 0.913). Statistically significant predictors are those predictors whose p value is less than 0.05 while p>.05 for statistically not significant predictors.

### 5.46 Relationship between Contextual Characteristics, PEOU, PU and EKDB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Donation Behavior (EKDB)

Figure 5-45: Components of Models 1-4 between Contextual characteristics, PEOU, PU and EKDB

Models 1-4 analyze various relationships between contextual characteristics (independent variables), PEOU and PU (moderating variables) and EKDB (dependent variables). Results for hierarchical multiple regression analysis for these models are shown in table 5-46 whereas figure 5-45 shows the components used in models 1-4.

Model 1 consists of contextual characteristics and EKDB. Multiple regression results for this model are shown in table 5-47. R = 0.836, R square = 0.699 and adjusted R square = 0.696. This shows that 69.6% variance in EKDB can be predicted sue to predictors in model 1. P value for this model is 0.000 which is less than 0.05 thus showing that the model is statistically significant.

Table 5-46: Models between Contextual Characteristics, PEOU, PU and EKDB

| Model Summary[e] | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .836[a] | 0.699 | 0.696 | 0.564 | 0.699 | 278.499 | 5 | 360 | 0.000 | 0.000 |
| 2 | .838[b] | 0.702 | 0.699 | 0.562 | 0.003 | 3.821 | 1 | 359 | 0.051 | 0.000 |
| 3 | .851[c] | 0.724 | 0.720 | 0.542 | 0.022 | 28.481 | 1 | 358 | 0.000 | 0.000 |
| 4 | .852[d] | 0.726 | 0.721 | 0.540 | 0.002 | 2.723 | 1 | 357 | 0.100 | 0.000 |
| a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu | | | | | | | | | | |
| b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd | | | | | | | | | | |
| c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc | | | | | | | | | | |
| d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc, inter_peou_pu_sftwre_tools | | | | | | | | | | |

Table 5-46 presents model 1. Each predictor's individual effect on EKDB in model 1 is shown in table 5-46a (Appendix I). P values for Work_Conditions and Software_Tools_Used are 0.000 and 0.000 respectively. Both these predictors are statistically significant as p<.05 for both predictors. P value for Physical_Demands is 0.979 which is greater than 0.05 thus showing the statistical insignificance of the predictor.

Model 2 is about analyzing the relationships between contextual characteristics and EKDB. Besides, this model also analyzes the moderating effect of PEOU and PU on the relationship between physical demands and EKDB. This model is presented through table 5-46b (Appendix I). Multiple regression values are shown in table 5-46. R = 0.838, R square = 0.702 and adjusted R square = 0.699. This adjusted R square value shows that 69.9% variance in EKDB can be predicted due to predictors in model 2. Value of p for this model is 0.000 which is less than 0.05 thus pointing out the statistical significance of the model. Each predictor's individual effect on EKDB is shown in table 5-46b (Appendix I). Work_Conditions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are both statistically significant predictors because of their p values. Physical_Demands (p = 0.184>.05) and inter_peou_pu_pd (p = 0.051>.05) are statistically not significant predictors.

Table 5-46c (Appendix I) presents model 3 which is about analyzing the moderating effect of PEOU and PU on the relationships between physical demands, work conditions and EKDB. In addition, this model also analyzes the relationships between contextual characteristics and EKDB. Multiple regression results for this model are shown in table 5-46. R = 0.851, R square = 0.724 and adjusted R square = 0.720 which means that 72% variance in EKDB can be predicted due to predictors in model 3. P value for this model is 0.000<.05 thus showing the statistical significance of the model. Table 5-46c (Appendix I) shows the individual effect of each predictor on EKDB in model 3. All the predictors in model 3 are statistically significant as their p values are less than 0.05.

Moderating effects of PEOU and PU on the relationships between contextual characteristics and EKDB are analyzed and presented in model 4 and table 5-46d (Appendix I) respectively. Additionally, this model and table also analyzes and presents the relationships between contextual characteristics and EKDB respectively. Based on multiple regression analysis, R = 0.852, R square = 0.726 and adjusted R square = 0.721 which means that 72.1% change in EKDB can be observed through predictors in model 4. Value of p for this model is 0.000 which is less than 0.05 thus showing that the model is statistically significant. The only predictors which are statistically not significant in this model are Software_Tools_Used (p = 0.309>.05) and inter_peou_pu_sftwre_tools (p = 0.100>.05). All other predictors of EKDB in model 4 are statistically significant (p<.05).

### 5.47 Relationship between Contextual Characteristics, PEOU, PU and EKCB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Explicit Knowledge Collection Behavior (EKCB)

Figure 5-46: Components of Models 1-4 between Contextual characteristics, PEOU, PU and EKCB

Components for models 1-4 are presented in figure 5-46. These components include contextual characteristics (predicted variable), PEOU and PU (moderating variables) and EKCB (predicted variable). Hierarchical multiple regression analysis was performed to see the relationship between these components and regression results are shown in table 5-47.

Model 1 in table 5-47 shows the multiple regression results for the relationships between contextual characteristics and EKCB. Value of R for this model is 0.833, R square = 0.694 and adjusted R square = 0.692 which shows that 69.2% variance in EKCB can be observed due to predictors in model 1. P value which is 0.000<.05 also shows that this model is statistically significant.

Table 5-47: Models between Contextual Characteristics, PEOU, PU and EKCB

| Model Summary[e] | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .833[a] | 0.694 | 0.692 | 0.570 | 0.694 | 272.313 | 5 | 360 | 0.000 | 0.000 |
| 2 | .834[b] | 0.696 | 0.693 | 0.569 | 0.002 | 2.441 | 1 | 359 | 0.119 | 0.000 |
| 3 | .846[c] | 0.716 | 0.712 | 0.551 | 0.020 | 24.980 | 1 | 358 | 0.000 | 0.000 |
| 4 | .848[d] | 0.719 | 0.714 | 0.549 | 0.003 | 3.719 | 1 | 357 | 0.055 | 0.000 |

a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu

b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd

c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc

d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc, inter_peou_pu_sftwre_tools

Table 5-47 presents model 1. Effect of each predictor in model 1 on EKCB is shown in table 5-47a (Appendix I). Based on p value, Work_Conditions (p = 0.000) and Software_Tools_Used (p = 0.000) are statistically significant predictors as p<.05 for these two predictors. Physical_Demands is the only statistically non-significant predictor in this model with p = 0.775>.05.

Model 2 is about analyzing the relationships between contextual characteristics and EKCB besides analyzing the moderating effect of PEOU and PU on the relationship between physical demands and EKCB. This model is presented through table 5-47b (Appendix I) and the multiple regression results are shown in table 5-46. R = 0.834, R square = 0.696 and adjusted R square = 0.693. This adjusted R square value shows that 69.3% change in EKCB can be observed due to predictors in model 2. Value of p for this model is 0.000, which is less than 0.05 thus suggesting that model is statistically significant. Table 5-47b (Appendix I) shows the individual effect of each predictor on EKCB in model 2. Work_Conditions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are the two predictors with statistical significance whereas Physical_Demands (p = 0.384>.05) and inter_peou_pu_pd (p = 0.119>.05) are statistically not significant.

Table 5-47c (Appendix I) presents model 3, which is about analyzing the moderating effects of PEOU and PU on the relationships between physical demands, work conditions and EKCB. Besides, this model also analyzes the relationships between contextual characteristics and EKCB. Multiple regression results for this model are shown in table 5-47. Based on regression results, R = 0.846, R square = 0.716 and adjusted R square = 0.712 which means that 71.2% variance in EKCB can be predicted due to predictors in model 3. P = 0.000<.05 for this model which shows the statistical significance of the model. Table 5-47c (Appendix I) shows the individual effect of each predictor on EKCB in model 3. Based on p value for statistical significance (p<.05), all the predictors for EKCB are statistically significance because their p values are less than 0.05.

Moderating effects of PEOU and PU on the relationships between contextual characteristics and EKCB are presented and analyzed in table 5-47d (Appendix I) and model 4 respectively. In addition, table 5-47c (Appendix I) and model 4 presents and analyzes the relationships between contextual characteristics and EKCB. Value of R for this model is 0.848. R square = 0.719 and adjusted R square = 0.714. This adjusted R square value shows that 71.4% change in EKCB can be observed due to predictors in model 4. Value of p for this model is 0.000, which is less than 0.05 thus showing that model is statistically significant. Each predictor's individual effect on EKCB in model 4 is shown in table 5-47d (Appendix I). P values for Physical_Demands, Work_Conditions, inter_peou_pu_pd and inter_peou_pu_wc are 0.000, 0.000, 0.000 and 0.003 respectively. All these p values are less than 0.05 thus showing the predictors with these p values are statistically significant. P values for statistically non-significant predictors (p>.05) Software_Tools_Used and inter_peou_pu_sftwre_tools are 0.576 and 0.055 respectively.

### 5.48 Relationship between Contextual Characteristics, PEOU, PU and IKDB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Donation Behavior (IKDB)

Figure 5-47: Components of Models 1-4 between Contextual characteristics, PEOU, PU and IKDB

Components for the models 1-4 are shown in figure 5-47. These components include contextual characteristics (independent variable), PEOU and PU (moderating variable) and IKDB (dependent variable). Relationships between these components were analyzed using hierarchical multiple regression analysis and results are shown in table 5-48.

Model 1 is about the multiple regression analysis between contextual characteristics and IKDB. Based on the results of multiple regression, value of R = 0.839, R square = 0.704 and adjusted R square = 0.701. This adjusted R square value shows that 70.1% variance in IKDB can be predicted through predictors of IKDB in model 1. P value for this model is 0.000 which is less than 0.05 thus shows the statistical significance of the model.

Table 5-48: Models between Contextual Characteristics, PEOU, PU and IKDB

| Model Summary[e] | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .839[a] | 0.704 | 0.701 | 0.568 | 0.704 | 284.855 | 5 | 360 | 0.000 | 0.000 |
| 2 | .839[b] | 0.704 | 0.701 | 0.569 | 0.000 | 0.342 | 1 | 359 | 0.559 | 0.000 |
| 3 | .850[c] | 0.722 | 0.718 | 0.552 | 0.018 | 23.364 | 1 | 358 | 0.000 | 0.000 |
| 4 | .851[d] | 0.725 | 0.720 | 0.550 | 0.002 | 3.223 | 1 | 357 | 0.073 | 0.000 |

a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu

b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd

c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc

d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc, inter_peou_pu_sftwre_tools

Model 1 is presented through table 5-48. Each predictor's individual effect on IKDB is shown in table 5-48a (Appendix I). Work_Conditions (p = 0.000) and Software_Tools_Used (p = 0.000) are the two predictors with statistical significance as the p values for these two predictors are less than 0.05 significance level. The only predictor which is statistically not significant in this model is Physical_Demands (p = 0.845). P value for Physical_demands is more than 0.05 significance level.

Table 5-48b (Appendix I) presents model 2 from table 5-48. This model analyzes the relationships between contextual characteristics and IKDB. Besides, this model also analyzes the moderating effects of PEOU and PU on the relationship between physical demands and IKDB. Multiple regression analysis results for this model are shown in table 5-48. R = 0.839, R square = 0.704 and adjusted R square = 0.701 which means that 70.1% change in IKDB can be predicted through predictors in model 2. Value of p = 0.000<.05 for this model which shows the statistical significance of the model. Table 5-48b (Appendix I) shows the effect of each predictor on IKDB in model 2. P values for Work_Conditions and Software_Tools_Used are 0.000 and 0.000 respectively. Both the p values are less than 0.05 thus showing the statistical significance of these two predictors. P values for Physical_Demands and inter_peou_pu_pd are 0.793 and 0.559 respectively, which are more than 0.05 thus showing the statistical insignificance of these two predictors.

Model 3 which is presented through table 5-48c (Appendix I) is about the analysis of moderating effects of PEOU and PU on the relationships between physical demands, work conditions and IKDB. In addition, this model also analyzes the relationships between contextual characteristics and IKDB. Value of R for this model is 0.850, R square = 0.722 and adjusted R square = 0.718. This value of adjusted R square shows that 71.8% variance in IKDB can be observed due to predictors in model 3. P = 0.000<.05 for this model which shows that the model is statistically significant. Effect of each predictor on IKDB in model 3 is shown in table 5-48c (Appendix I). Based on p value criteria to analyze the statistical significance and insignificance, all the predictors in this model are statistically significant. P value for every predictor is less than 0.05.

Moderating effects of PEOU and PU on the relationships between contextual characteristics and IKDB are analyzed in model 4 of table 5-48. This model also analyzes the relationships between contextual characteristics and IKDB. This model is presented through table 5-48d (Appendix I). Multiple regression results for the model are shown in table 5-48. R = 0.851, R square = 0.725 and adjusted R square = 0.720. This adjusted R square value shows that 72% change in IKDB can be observed due to predictors in model 4. Value of p for this model is 0.000 which is less than 0.05 thus showing the statistical significance of the model. Table 5-48d (Appendix I) shows the effect of each predictor on IKDB in model 4. In this model, Physical_Demands (p = 0.001<.05), Work_Conditions (p = 0.000<.05), inter_peou_pu_pd (p = 0.000<.05) and inter_peou_pu_wc (p = 0.005<.05) are statistically significant predictors whereas Software_Tools_Used (p = 0.494>.05) and inter_peou_pu_sftwre_tools (p = 0.073>.05) are statistically not significant predictors.

### 5.49 Relationship between Contextual Characteristics, PEOU, PU and IKCB

**Predictors**

- Physical Demands
- Work Conditions
- Tools and Software Used

**Moderator**

- Perceived Ease of Use (PEOU)
- Perceived Usefulness (PU)

**Dependent**

- Implicit Knowledge Collection Behavior (IKCB)

Figure 5-48: Components of Models 1-4 between Contextual characteristics, PEOU, PU and IKCB

Figure 5-48 shows the components of models 1-4. These components include independent variables (physical demands, work conditions and tools and software used). Figure also include moderating variables (PEOU and PU) and dependent variable (IKCB).

Model 1 of these results is about the relationships between contextual variables and IKCB. These results show that R = 0.837, R square = 0.701 and adjusted R square = 0.698. These values suggest that 69.8% variance in IKCB can be accounted for through independent variables of this model. P = 0.000<.05 thus showing the significance of the model.

Table 5-49: Models between Contextual Characteristics, PEOU, PU and IKCB

| Model Summary[e] | | | | | | | | | | ANOVA |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Std. | Change Statistics | | | | | |
| Model | R | R Square | Adjusted R Square | Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change | p |
| 1 | .837[a] | 0.701 | 0.698 | 0.564 | 0.701 | 280.690 | 5 | 360 | 0.000 | 0.000 |
| 2 | .837[b] | 0.701 | 0.698 | 0.564 | 0.001 | 0.873 | 1 | 359 | 0.351 | 0.000 |
| 3 | .851[c] | 0.725 | 0.721 | 0.542 | 0.023 | 30.445 | 1 | 358 | 0.000 | 0.000 |
| 4 | .853[d] | 0.727 | 0.723 | 0.540 | 0.003 | 3.533 | 1 | 357 | 0.061 | 0.000 |
| a. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu | | | | | | | | | | |
| b. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd | | | | | | | | | | |
| c. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc | | | | | | | | | | |
| d. Predictors: (Constant), Software_Tools_Used, Physical_Demands, Work_Conditions, peou, pu, inter_peou_pu_pd, inter_peou_pu_wc, inter_peou_pu_sftwre_tools | | | | | | | | | | |

Table 5-49a (Appendix I) shows the individual results of model 1. This table shows the individual effect of each independent variable on IKCB. Through this table, it can be seen that Physical_Demands (p = 0.624>.05) is the only variable which is statistically insignificant. Work_Conditions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are both statistically significant.

Regression results of model 2 are shown in table 5-49. Based on these results, R = 0.837, R square = 0.701 and adjusted R square = 0.698. These values show that 69.8% variance in IKCB can be predicted through variables of this model. Table 5-49b (Appendix I) shows the individual effect of each predictor on IKDB. Values from table 5-49b (Appendix I) show that Physical_Demands (p = 0.318) and inter_peou_pu_pd (p = 0.351) are statistically not significant contributors based on their p values which are more than 0.05 significance level. However, Work_Conditions (p = 0.000<.05) and Software_Tools_Used (p = 0.000<.05) are statistically significant predictors.

Correlation results for model 3 are shown in table 5-49. This model is about the moderating effects of PEOU and PU on the relationships between Physical_Demands and Work_Conditions.  Value of R for this model is 0.851, R square = 0.725 and adjusted R square = 0.721. These values show that 72.1% variance in IKCB can be observed due to predictors of model 3. Table 5-49c (Appendix I) shows the results for the individual effect of each predictor of model 3 on IKCB. Based on these values, all the predictors are statistically significant as their p values are less than 0.05. Physical_Demands = 0.000; Work_Conditions = 0.000; Software_Tools_Used = 0.000; inter_peou_pu_pd = 0.000 and inter_peou_pu_wc = 0.000.

Model 4 is about the moderating effects of PEOU and PU between Physical_Demands, Work_Conditions, Software_Tools_Used and IKCB. Results for this model are shown in table 5-49. R = 0.853, R square = 0.727 and adjusted R square = 0.723 which shows 72.3% prediction of variance through independent variables. Table 5-49d (Appendix I) shows the individual effect of each predictor on IKCB. Software_Tools_Used (p = 0.579) and inter_peou_pu_sftwre_tools (p = 0.061) are the only two predictors which have statistically no significant role. All other predictors are statistically significant based on the p values these predictors have (p<.05).

**5.50 Summary of Chapter**

This chapter reports the results between work design characteristics (independent variable), KSB (dependent variable) and PEOU and PU (moderating variables). Since work design characteristics were categorized into task, knowledge, social and contextual characteristics therefore this chapter was also divided into four sections. These four sections showed the results in the following way:

Part I: Task Characteristics, KSB (EKDB, EKCB, IKDB and IKCB) and moderating variables (PEOU and PU).

Part II: Knowledge Characteristics, KSB (EKDB, EKCB, IKDB and IKCB) and moderating variables (PEOU and PU).

Part III: Social Characteristics, KSB (EKDB, EKCB, IKDB and IKCB) and moderating variables (PEOU and PU).

Part IV: Contextual Characteristics, KSB (EKDB, EKCB, IKDB and IKCB) and moderating variables (PEOU and PU).

Results from this chapter indicated that all the work design characteristics (task, knowledge, social and contextual) are important predictors for KSB. Perceived usefulness also played a significant moderating role. However, perceived ease of use and combine effect of PEOU and PU played a positive moderating role but not very statistically significant.

CHAPTER 6

DISCUSSION

## 6.0 Overview

This chapter is about discussion on the results presented in chapters 4 and 5. Discussion is carried out on the work design characteristics and personality traits of Malaysian Software Engineers. In addition, this chapter also discusses the relationships and hypotheses results between work design characteristics (task characteristics, knowledge characteristics, social and contextual characteristics) and Knowledge Sharing Behavior (KSB) (Explicit Knowledge Donation Behavior (EKDB), Explicit Knowledge Collection Behavior (EKCB), Implicit Knowledge Donation Behavior (IKDB) and Implicit Knowledge Collection Behavior (IKCB)). Next, this chapter includes discussion on results between personality traits and KSB (EKDB, EKCB, IKDB and IKCB). At the end, discussion on the moderating role of Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) is also part of this chapter.

## 6.1 Work Design Characteristics of Software Engineers

Table 5-1 (chapter 5) shows the mean score and standard deviation of work design characteristics of Malaysian Software Engineers (SEs). Respondents were asked questions regarding their work design characteristics. These work design characteristics were categorized into motivational, social and contextual characteristics. Motivational characteristics were further categorized into task and knowledge characteristics. Responses from SEs show that they scored considerably high on task identity (mean = 3.88, SD = 1.02), feedback from job (mean = 3.88, SD = 1.04), skill variety (mean = 3.88, SD = 1.05), received interdependence (mean = 3.88, SD = 1.04) and software and tools used (mean = 3.88, SD = 1.06). Several factors may have contributed to these high scores. One of the possible reasons for SEs (software developers in this case) to score high in task identity is completion of their job as a whole (for example, software developer will be responsible for the whole amount of work s/he is assigned, maintenance engineer will be responsible for his/her own work, tester will be responsible for his/her part). Similarly, once their job is done, they can easily see that whether they have met the requirements of the client or not. So in this way they can get the feedback from job itself. Besides, SEs need knowledge and experience on various kinds of programming languages and tools used so they have higher skill variety and same goes for software and tools used. The job of software developer is also affected by software requirement engineer and software designer because if they do not perform their jobs properly then software developer will also be not able to perform well, resulting in higher received interdependence.

Work design characteristics with relatively low score for Malaysian SEs includes job complexity (mean = 2.36, SD = 1.10) and physical demands (mean = 2.29, SD = 0.95). Since, SEs are specialized in their jobs and they need specialized skills and knowledge, their job complexity is high. Although mean score is 2.36 (low in terms of 1-5 Likert scale) which is due to the nature of questions asked. Questions asked were related to job simplicity because job complexity and job simplicity are opposite to each other. As the job of SEs is not simple thus they responded low. In other words, SEs responded that their job complexity is high. In addition, the requirements of client keep on changing which makes the job complex as well. Rapid development in technology is another factor which adds to job complexity as SEs then have to keep themselves updated with the latest technology otherwise they will lose their competitive advantage. Physical demand in this profession is relatively low in comparison to other professions. Job of SEs is office or table job so there is not much physical effort. Summary of results about work design characteristics of Malaysian SEs is shown in table 5-1 (chapter 5).

## 6.2 Personality Traits of Software Engineers

Table 4-1 (chapter 4) reports the personality traits of Malaysian SEs. As shown, Malaysian SEs scored high in extraversion (mean = 3.78, SD = 1.13) and conscientiousness (mean = 3.68, SD = 0.99), moderate in openness to experience (mean = 3.63, SD = 0.87) and agreeableness (mean = 3.63, SD = 1.04). However, they are low on neuroticism trait (mean = 2.68, SD = 0.99). This categorization of low, medium and high is based on Landell's study. Landell (1997) categorized mean scores as low, medium and high based on Likert scale. Values from 1.0 – 2.33 are considered as low, 2.34 – 3.67 as moderate and 3.68 – 5 as high. Findings of current research are mixed, meaning that some results are consistent with previous results while others are not. For example, Sodiya et al., (2007) found that software coders (SEs in this case) are high in agreeableness (moderate in our case), moderate in conscientiousness (high in our case) and low in neuroticism (low in our case). One of the possible answers to this difference in results can be the cultural change. The study conducted by Sodiya et al., (2007) was based on Nigerian SEs as compared to this research which is based on Malaysian SEs thus cultural differences between Nigeria and Malaysia can explain the dissimilarity in personality traits between SEs of these two countries. This personality traits difference between SEs can also be supported from the work of Clark (1990, p.66), who said "*each nation have a distinctive, enduring pattern of behavior and/or personality characteristics*". Personality traits difference was also reported by Chen, Lee and Stevenson, (1995) who found Chinese and Japanese students are different on some personality traits than American and Canadian students.

**6.3 Work Design Characteristics and Knowledge Sharing Behavior**

The shift from industrialization to knowledge base economy has stressed the importance of knowledge. Knowledge needs to be shared among individuals, groups and organizations (Jackson, Chuang, Harden and Jiang, 2006) at same and different levels because knowledge is now considered very critical for the organizational development. Knowledge sharing is a process through which individuals exchange their knowledge in order to create new knowledge (Van Den Hooff and De Ridder, 2004). Thus, knowledge sharing is knowledge exchange and knowledge exchange was referred as performance related outcome by Rabbiosi, Makela and Rabbiosi, (2009). In other words, knowledge sharing is also part of performance related outcome. However, there are various factors, which effect KSB of an individual (Cyr and Choo, 2010).

Organizations view knowledge sharing to be a behavior (which makes it a behavioral outcome) through which one individual shares his/her knowledge or experience with others (Cyr and Choo, 2010). Since knowledge sharing behavior is a behavioral and performance related outcome (Rabbiosi, Makela and Rabbiosi, 2009) and work design has an impact on behavioral outcomes (performance, absenteeism and turnover intention), attitudinal, role perception and well-beingness (Humphrey, Nahrgang, and Morgeson, 2007) therefore it is worth analyzing the impact of work design characteristics on KSB since it is a performance related outcome (Rabbiosi, Makela and Rabbiosi, 2009).

This study focused on work design characteristics by Morgeson and Humphrey, (2006) because it is one of most comprehensive methods to assess the work design characteristics of a working environment. Dimensions to analyze work designing characteristics includes those related to the task itself or nature of work, knowledge required to complete the task, social interaction while performing the job and the environment or physical area in which the job is being performed.

Work design characteristics by Morgeson and Humphrey, (2006) consists of motivational (task and knowledge), social and contextual characteristics. Impact of these characteristics on KSB was tested through hypotheses development. Table 6-1 provides an overall summary of hypotheses outcome between work design characteristics, PEOU, PU and KSB.

Table 6-1: Hypotheses Testing between Work Design Characteristics, PEOU, PU and Knowledge Sharing Behaviour

| Sr. No. | Hypothesis | Result |
|---|---|---|
| 1 | **$H_2$**: Work Design Characteristics → KSB of SEs. | Accepted |
| 2 | **$H_6$**: Work Design Characteristics → KSB of SEs (moderator: PEOU). | Accepted |
| 3 | **$H_7$**: Work Design Characteristics → KSB of SEs (moderator: PU). | Accepted |
| 4 | **$H_8$**: Work Design Characteristics → KSB of SEs (moderators: PEOU + PU). | Accepted |

### 6.3.1 Task Characteristics and Knowledge Sharing Behavior

Task characteristics includes autonomy (work schedule, decision making and work methods), task variety, task significance, task identity and feedback from job (Morgeson and Humphrey, 2006). These characteristics were expected to increase KSB as they were expected to increase positive behavioral outcomes (Humphrey, Nahrgang and Morgeson, 2007). As KSB consists of knowledge donation and collection therefore it was hypothesized that:

***$H2a_1$:*** *Task characteristics affect KSB of SEs.*
***$H2a_2$:*** *Task characteristics affect EKDB of SEs.*
***$H2a_3$:*** *Task characteristics affect EKCB of SEs.*
***$H2a_4$:*** *Task characteristics affect IKDB of SEs.*
***$H2a_5$:*** *Task characteristics affect IKCB of SEs.*

Results of this study proved these hypotheses that task characteristics do positively affect KSB of an individual. Results show that high correlation exists between EKDB and task characteristics (R Square = 0.707, R Square change = 70.7%) and 70.1% variance (adjusted R Square = 0.701) in EKDB can be due to task characteristics. At the same time, task characteristics also showed positive relationships with EKCB (R Square = 0.702, R Square change = 70.2%), IKDB (R Square = 0.702, R Square change = 70.2%) and IKCB (R Square = 0.705, R Square change = 70.5%).

These results show that overall task characteristics have a positive significant relationship with KSB which proves hypothesis $H2_{a1}$. Meaning that, higher task characteristics for Software Engineers will result in higher KSB among them. Since SEs are high in task characteristics as shown in table 5-1 (Chapter 5) (work schedule autonomy, mean = 3.77; decision making autonomy, mean = 3.78; work method autonomy, mean = 3.80; task variety, mean = 3.83; task significance, mean = 3.79; task identity, mean = 3.88 and feedback from job, mean = 3.88) and as task characteristics are motivational characteristics which means they will motivate SEs to perform their job more effectively thus increases their job performance and since KSB is a performance related outcome (Rabbiosi et al., 2009) thus this hypothesis is supported that SEs with more positive task characteristics will result in higher KSB. Table 6-2 provides the summary of results about hypotheses between task characteristics, PEOU, PU and KSB.

Table 6-2: Hypotheses Testing between Task Characteristics, PEOU, PU and Knowledge Sharing Behavior

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 1 | **$H2a_1$:** Task characteristics → KSB of SEs. | - | - | - | - | Accepted |
| 2 | **$H6a_1$**: Task characteristics → KSB of SEs (moderator: PEOU). | - | - | - | - | Accepted |
| 3 | **$H7a_1$:** Task characteristics → KSB of SEs (moderator: PU). | - | - | - | - | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 4 | **H8a$_1$**: Task characteristics → KSB of SEs (moderators: PEOU + PU). | - | - | - | - | Accepted |
| 5 | **H2a$_2$:** Task characteristics → EKDB of SEs. | 0.707 | 0.701 | 0.707 (70.7%) | 0.000 | Accepted |
| 6 | **H6a$_2$:** Task characteristics → EKDB of SEs (moderator: PEOU). | 0.719 | 0.708 | 0.012 (1.2%) | 0.000 | Accepted |
| 7 | **H7a$_2$:** Task characteristics → EKDB of SEs (moderator: PU). | 0.789 | 0.780 | 0.082 (8.2%) | 0.000 | Accepted |
| 8 | **H8a$_2$:** Task characteristics → EKDB of SEs (moderators: PEOU + PU). | 0.714 | 0.702 | 0.007 (0.7%) | 0.000 | Accepted |
| 9 | **H2a$_3$:** Task characteristics → EKCB of SEs. | 0.702 | 0.696 | 0.702 (70.2%) | 0.000 | Accepted |
| 10 | **H6a$_3$:** Task characteristics → EKCB of SEs (moderator: PEOU). | 0.715 | 0.703 | 0.013 (1.3%) | 0.000 | Accepted |
| 11 | **H7a$_3$:** Task characteristics → EKCB of SEs (moderator: PU). | 0.781 | 0.772 | 0.079 (7.9%) | 0.000 | Accepted |
| 12 | **H8a$_3$:** Task characteristics → EKCB of SEs (moderators: PEOU + PU). | 0.708 | 0.696 | 0.006 (0.6%) | 0.000 | Accepted |
| 13 | **H2a$_4$:** Task characteristics → IKDB of SEs. | 0.702 | 0.696 | 0.702 (70.2%) | 0.000 | Accepted |
| 14 | **H6a$_4$:** Task characteristics → IKDB of SEs (moderator: PEOU). | 0.717 | 0.706 | 0.015 (1.5%) | 0.000 | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 15 | **H7a$_4$:** Task characteristics → IKDB of SEs (moderator: PU). | 0.780 | 0.771 | 0.078 (7.8%) | 0.000 | Accepted |
| 16 | **H8a$_4$:** Task characteristics → IKDB of SEs (moderators: PEOU + PU). | 0.711 | 0.700 | 0.009 (0.9%) | 0.000 | Accepted |
| 17 | **H2a$_5$:** Task characteristics → IKCB of SEs. | 0.705 | 0.699 | 0.705 (70.5%) | 0.000 | Accepted |
| 18 | **H6a$_5$:** Task characteristics → IKCB of SEs (moderator: PEOU). | 0.722 | 0.711 | 0.017 (1.7%) | 0.000 | Accepted |
| 19 | **H7$_{a5}$:** Task characteristics → IKCB of SEs (moderator: PU). | 0.786 | 0.777 | 0.081 (8.1%) | 0.000 | Accepted |
| 20 | **H8$_{a5}$:** Task characteristics → IKCB of SEs (moderators: PEOU + PU). | 0.713 | 0.702 | 0.008 (0.8%) | 0.000 | Accepted |

### 6.3.2 Knowledge Characteristics and Knowledge Sharing Behavior

Knowledge characteristics consists of information processing, job complexity, specialization, skill variety and problem solving. Again as knowledge characteristics are motivational characteristics therefore it was hypothesized that these characteristics will have a positive significant relationship with KSB. Therefore hypotheses were as follows:

***H2$_{b1}$:*** *Knowledge characteristics affect KSB of SEs.*
***H2$_{b2}$:*** *Knowledge characteristics affect EKDB of SEs.*
***H2$_{b3}$:*** *Knowledge characteristics affect EKCB of SEs.*
***H2$_{b4}$:*** *Knowledge characteristics affect IKDB of SEs.*
***H2$_{b5}$:*** *Knowledge characteristics affect IKCB of SEs.*

Results from table 6-3 show that all these hypotheses are proved. Since SEs are high in knowledge characteristics (table 5-1: Chapter 5: information processing, mean

= 3.85; job complexity, mean = 2.36; specialization, mean = 3.87; problem solving, mean = 3.82 and skill variety, mean = 3.88) therefore they showed positive relationship with KSB. SEs scored high in information processing because they have to process a lot of information from collecting client's requirements to software testing. They require skills in more than one platforms to keep themselves updated which results in higher skill variety. Requirements for every client may vary from each other so they have to solve a lot of problems when meeting the requirements of the clients and they need to be specialized in their jobs therefore they scored high on these characteristics. As all these motivational characteristics makes the job of SEs interesting therefore this higher motivation leads them to higher performance and KSB as latter is part of performance. Hypotheses are supported by the results from table 6-3. In this table, results show that knowledge characteristics have strong relationship with KSB (knowledge characteristics and EKDB: R Square = 0.724, R Square change = 72.4%, knowledge characteristics and EKCB: R Square = 0.724, R Square change = 72.4%, knowledge characteristics and IKDB: R Square = 0.714, R Square change = 71.4% and knowledge characteristics and IKCB: R Square = 0.720, R Square change = 72.0%).

Table 6-3: Hypotheses Testing between Knowledge Characteristics, PEOU, PU and Knowledge Sharing Behavior

| **Sr. No.** | **Hypothesis** | **R Square** | **Adjusted R Square** | **R Square Change** | **p Value** | **Result** |
|---|---|---|---|---|---|---|
| 1 | **$H2_{b1}$:** Knowledge characteristics → KSB of SEs. | - | - | - | - | Accepted |
| 2 | **$H6_{b1}$**: Knowledge characteristics → KSB of SEs (moderator: PEOU). | - | - | - | - | Accepted |
| 3 | **$H7_{b1}$:** Knowledge characteristics → KSB of SEs (moderator: PU). | - | - | - | - | Accepted |
| 4 | **$H8_{b1}$:** Knowledge characteristics → KSB of SEs (moderators: PEOU + PU). | - | - | - | - | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 5 | **H2$_{b2}$:** Knowledge characteristics → EKDB of SEs. | 0.724 | 0.721 | 0.724 (72.4%) | 0.000 | Accepted |
| 6 | **H6$_{b2}$:** Knowledge characteristics → EKDB of SEs (moderator: PEOU). | 0.732 | 0.724 | 0.008 (0.8%) | 0.000 | Accepted |
| 7 | **H7$_{b2}$:** Knowledge characteristics → EKDB of SEs (moderator: PU). | 0.809 | 0.804 | 0.085 (8.5%) | 0.000 | Accepted |
| 8 | **H8$_{b2}$:** Knowledge characteristics → EKDB of SEs (moderators: PEOU + PU). | 0.736 | 0.728 | 0.012 (1.2%) | 0.000 | Accepted |
| 9 | **H2$_{b3}$:** Knowledge characteristics → EKCB of SEs. | 0.724 | 0.721 | 0.724 (72.4%) | 0.000 | Accepted |
| 10 | **H6$_{b3}$:** Knowledge characteristics → EKCB of SEs (moderator: PEOU). | 0.733 | 0.726 | 0.009 (0.9%) | 0.000 | Accepted |
| 11 | **H7$_{b3}$:** Knowledge characteristics → EKCB of SEs (moderator: PU). | 0.799 | 0.794 | 0.075 (7.5%) | 0.000 | Accepted |
| 12 | **H8$_{b3}$:** Knowledge characteristics → EKCB of SEs (moderators: PEOU + PU). | 0.732 | 0.724 | 0.008 (0.8%) | 0.000 | Accepted |
| 13 | **H2$_{b4}$:** Knowledge characteristics → IKDB of SEs. | 0.714 | 0.710 | 0.714 (71.4%) | 0.000 | Accepted |
| 14 | **H6$_{b4}$:** Knowledge characteristics → IKDB of SEs (moderator: PEOU). | 0.724 | 0.716 | 0.010 (1.0%) | 0.000 | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 15 | **$H7_{b4}$:** Knowledge characteristics → IKDB of SEs (moderator: PU). | 0.788 | 0.782 | 0.074 (7.4%) | 0.000 | Accepted |
| 16 | **$H8_{b4}$:** Knowledge characteristics → IKDB of SEs (moderators: PEOU + PU). | 0.722 | 0.714 | 0.008 (0.8%) | 0.000 | Accepted |
| 17 | **$H2_{b5}$:** Knowledge characteristics → IKCB of SEs. | 0.720 | 0.717 | 0.720 (72.0%) | 0.000 | Accepted |
| 18 | **$H6_{b5}$:** Knowledge characteristics → IKCB of SEs (moderator: PEOU). | 0.733 | 0.726 | 0.013 (1.3%) | 0.000 | Accepted |
| 19 | **$H7_{b5}$:** Knowledge characteristics → IKCB of SEs (moderator: PU). | 0.795 | 0.789 | 0.075 (7.5%) | 0.000 | Accepted |
| 20 | **$H8_{b5}$:** Knowledge characteristics → IKCB of SEs (moderators: PEOU + PU). | 0.730 | 0.722 | 0.001 (1.0%) | 0.000 | Accepted |

### 6.3.3 Social Characteristics and Knowledge Sharing Behavior

Social characteristics, which are discussed in this research work, includes social support, initiated interdependence, received interdependence, interaction outside organization (not used for analysis in this study because of low Cronbach alpha) and feedback from others. Social characteristics impact different work related outcomes and since knowledge sharing is a performance related outcome (Rabbiosi, Makela and Rabbiosi, 2009) at work and a social activity (Ubon and Kimble, 2002) therefore people share their knowledge with each other on jobs which have high social characteristics. In addition, Humphrey, Nahrgang and Morgeson, (2007) also expected that social characteristics will affect the behavioral outcomes and since knowledge sharing is a behavioral plus performance related outcome therefore it was hypothesized that:

***H2c*$_1$*:*** *Social characteristics affect KSB of SEs.*
***H2c*$_2$*:*** *Social characteristics affect EKDB of SEs.*
***H2c*$_3$*:*** *Social characteristics affect EKCB of SEs.*
***H2c*$_4$*:*** *Social characteristics affect IKDB of SEs.*
***H2c*$_5$*:*** *Social characteristics affect IKCB of SEs.*

Table 6-4 presents the results for these hypotheses. Results show that all these hypotheses that social characteristics have a positive effect on KSB are accepted. Reason for these results is that because SEs scored high in social characteristics (table 5-1: Chapter 5: social support, mean = 3.78; initiated interdependence, mean = 3.79; received interdependence, mean = 3.88 and feedback from others, man = 3.82). These values show that SEs have more social interaction while they are at job. Like, SEs have to interact continuously with the project sponsor, client or they have to talk to each other as team members which increases social support. Besides, their job depends on each other as well. For example, software developer's job depends on software designer's job and software tester's job depends on software developer or coder. This shows that SEs have high initiated as well as received interdependence. Feedback from others is also another attribute of SEs as they can know about their job performance from the feedback of their client or from their team members or project managers. As all these characteristics show that SEs have high social characteristics which makes them more sociable and thus increases the chances of KSB. Due to this reason, results prove that social characteristics positively effect KSB. This is reflected through the following results: social characteristics and EKDB, R Square = 0.725, R Square change = 72.5%; social characteristics and EKCB, R Square = 0.711, R Square change = 71.1%; social characteristics and IKDB, R Square = 0.713, R Square change = 71.3%; social characteristics and IKCB, R Square = 0.713, R Square change = 71.3%. All these correlation and variance values between social characteristics and KSB show that these two variables are highly correlated to each other and increase in KSB can be attributed to social characteristics to a greater extent.

Table 6-4: Hypotheses Testing between Social Characteristics, PEOU, PU and Knowledge Sharing Behavior

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 1 | **$H2_{c1}$:** Social characteristics → KSB of SEs. | - | - | - | - | Accepted |
| 2 | **$H6_{c1}$**: Social characteristics → KSB of SEs (moderator: PEOU). | - | - | - | - | Accepted |
| 3 | **$H7_{c1}$:** Social characteristics → KSB of SEs (moderator: PU). | - | - | - | - | Accepted |
| 4 | **$H8_{c1}$:** Social characteristics → KSB of SEs (moderators: PEOU + PU). | - | - | - | - | Accepted |
| 5 | **$H2_{c2}$:** Social characteristics → EKDB of SEs. | 0.725 | 0.722 | 0.725 (72.5%) | 0.000 | Accepted |
| 6 | **$H6_{c2}$:** Social characteristics → EKDB of SEs (moderator: PEOU). | 0.737 | 0.731 | 0.012 (1.2%) | 0.000 | Accepted |
| 7 | **$H7_{c2}$:** Social characteristics → EKDB of SEs (moderator: PU). | 0.798 | 0.793 | 0.073 (7.3%) | 0.000 | Accepted |
| 8 | **$H8_{c2}$:** Social characteristics → EKDB of SEs (moderators: PEOU + PU). | 0.729 | 0.722 | 0.004 (0.4%) | 0.000 | Accepted |
| 9 | **$H2_{c3}$:** Social characteristics → EKCB of SEs. | 0.711 | 0.708 | 0.711 (71.1%) | 0.000 | Accepted |
| 10 | **$H6_{c3}$:** Social characteristics → EKCB of SEs (moderator: PEOU). | 0.725 | 0.719 | 0.014 (1.4%) | 0.000 | Accepted |
| 11 | **$H7_{c3}$:** Social characteristics → EKCB of SEs (moderator: PU). | 0.785 | 0.781 | 0.074 (7.4%) | 0.000 | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 12 | **H8$_{c3}$:** Social characteristics → EKCB of SEs (moderators: PEOU + PU). | 0.716 | 0.710 | 0.005 (0.5%) | 0.000 | Accepted |
| 13 | **H2$_{c4}$:** Social characteristics → IKDB of SEs. | 0.713 | 0.710 | 0.713 (71.3%) | 0.000 | Accepted |
| 14 | **H6$_{c4}$:** Social characteristics → IKDB of SEs (moderator: PEOU). | 0.731 | 0.725 | 0.018 (1.8%) | 0.000 | Accepted |
| 15 | **H7$_{c4}$:** Social characteristics → IKDB of SEs (moderator: PU). | 0.782 | 0.777 | 0.069 (6.9%) | 0.000 | Accepted |
| 16 | **H8$_{c4}$:** Social characteristics → IKDB of SEs (moderators: PEOU + PU). | 0.720 | 0.714 | 0.007 (0.7%) | 0.000 | Accepted |
| 17 | **H2$_{c5}$:** Social characteristics → IKCB of SEs. | 0.713 | 0.710 | 0.713 (71.3%) | 0.000 | Accepted |
| 18 | **H6$_{c5}$:** Social characteristics → IKCB of SEs (moderator: PEOU). | 0.731 | 0.725 | 0.018 (1.8%) | 0.000 | Accepted |
| 19 | **H7$_{c5}$:** Social characteristics → IKCB of SEs (moderator: PU). | 0.786 | 0.781 | 0.073 (7.3%) | 0.000 | Accepted |
| 20 | **H8$_{c5}$:** Social characteristics → IKCB of SEs (moderators: PEOU + PU). | 0.720 | 0.713 | 0.007 (0.7%) | 0.000 | Accepted |

### 6.3.4 Contextual Characteristics and Knowledge Sharing Behavior

Contextual characteristics include ergonomics (not used in this study because of low Cronbach alpha), physical demands, work conditions and equipment used (modified to software and tools used). Contextual characteristics also have an impact on the behavior of an individual. Like, if physical demand of a job or task increases and the working environment is not good then the physical comfort of employee will decrease (Campion, 1988). This increase in physical un-comfort will decrease the performance of that individual and as knowledge exchange is a performance related outcome so KSB will also decrease. Based on this it was hypothesized that:

***$H2_{d1}$:*** *Contextual characteristics affect KSB of SEs.*
***$H2_{d2}$:*** *Contextual characteristics affect EKDB of SEs.*
***$H2_{d3}$:*** *Contextual characteristics affect EKCB of SEs.*
***$H2_{d4}$:*** *Contextual characteristics affect IKDB of SEs.*
***$H2_{d5}$:*** *Contextual characteristics affect IKCB of SEs.*

Results of these hypotheses are presented in table 6-5. Results show that contextual characteristics do impact KSB of SEs. Table 5-1 (Chapter 5) show that SE's jobs are not high in physical demands (mean = 2.29), working conditions are good (mean = 3.79) and they know the software and tools which they are using (mean = 3.88). These mean values show that lower requirement for physical demand, appropriate working conditions and relevant software used on the job increases the comfort level of SEs which makes them motivated towards their job and ultimately increases their KSB as positive motivation leads to higher KSB. Results of hypotheses from table 6-5 prove that contextual characteristics do have an impact on KSB. Correlation and variance values for the above mentioned hypotheses (between contextual characteristics and KSB) are as follows: Contextual characteristics and EKDB, R Square = 0.699, R Square change = 69.9%; Contextual characteristics and EKCB, R Square = 0.694, R Square change = 69.4%; Contextual characteristics and IKDB, R Square = 0.704, R Square change = 70.4%; Contextual characteristics and IKCB, R Square = 0.701, R Square change = 70.1%.

Table 6-5: Hypotheses Testing between Contextual Characteristics, PEOU, PU and Knowledge Sharing Behavior

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 1 | **$H2_{d1}$:** Contextual characteristics → KSB of SEs. | - | - | - | - | Accepted |
| 2 | **$H6_{d1}$**: Contextual characteristics → KSB of SEs (moderator: PEOU). | - | - | - | - | Accepted |
| 3 | **$H7_{d1}$:** Contextual characteristics → KSB of SEs (moderator: PU). | - | - | - | - | Accepted |
| 4 | **$H8_{d1}$:** Contextual characteristics → KSB of SEs (moderators: PEOU + PU). | - | - | - | - | Accepted |
| 5 | **$H2_{d2}$:** Contextual characteristics → EKDB of SEs. | 0.699 | 0.696 | 0.699 (69.9%) | 0.000 | Accepted |
| 6 | **$H6_{d2}$:** Contextual characteristics → EKDB of SEs (moderator: PEOU). | 0.708 | 0.703 | 0.009 (0.9%) | 0.000 | Accepted |
| 7 | **$H7_{d2}$:** Contextual characteristics → EKDB of SEs (moderator: PU). | 0.805 | 0.801 | 0.106 (10.6%) | 0.000 | Accepted |
| 8 | **$H8_{d2}$:** Contextual characteristics → EKDB of SEs (moderators: PEOU + PU). | 0.726 | 0.721 | 0.027 (2.7%) | 0.000 | Accepted |
| 9 | **$H2_{d3}$:** Contextual characteristics → EKCB of SEs. | 0.694 | 0.692 | 0.694 (69.4%) | 0.000 | Accepted |
| 10 | **$H6_{d3}$:** Contextual characteristics → EKCB of SEs (moderator: PEOU). | 0.705 | 0.700 | 0.011 (1.1%) | 0.000 | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 11 | **H7$_{d3}$:** Contextual characteristics → EKCB of SEs (moderator: PU). | 0.792 | 0.789 | 0.098 (9.8%) | 0.000 | Accepted |
| 12 | **H8$_{d3}$:** Contextual characteristics → EKCB of SEs (moderators: PEOU + PU). | 0.719 | 0.714 | 0.025 (2.5%) | 0.000 | Accepted |
| 13 | **H2$_{d4}$:** Contextual characteristics → IKDB of SEs. | 0.704 | 0.701 | 0.704 (70.4%) | 0.000 | Accepted |
| 14 | **H6$_{d4}$:** Contextual characteristics → IKDB of SEs (moderator: PEOU). | 0.718 | 0.713 | 0.014 (1.4%) | 0.000 | Accepted |
| 15 | **H7$_{d4}$:** Contextual characteristics → IKDB of SEs (moderator: PU). | 0.788 | 0.785 | 0.084 (8.4%) | 0.000 | Accepted |
| 16 | **H8$_{d4}$:** Contextual characteristics → IKDB of SEs (moderators: PEOU + PU). | 0.725 | 0.720 | 0.021 (2.1%) | 0.000 | Accepted |
| 17 | **H2$_{d5}$:** Contextual characteristics → IKCB of SEs. | 0.701 | 0.698 | 0.701 (70.1%) | 0.000 | Accepted |
| 18 | **H6$_{d5}$:** Contextual characteristics → IKCB of SEs (moderator: PEOU). | 0.714 | 0.710 | 0.013 (1.3%) | 0.000 | Accepted |
| 19 | **H7$_{d5}$:** Contextual characteristics → IKCB of SEs (moderator: PU). | 0.791 | 0.787 | 0.090 (9.0%) | 0.021 | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 20 | **H8$_{d5}$:** Contextual characteristics → IKCB of SEs (moderators: PEOU + PU). | 0.727 | 0.723 | 0.026 (2.6%) | 0.000 | Accepted |

### 6.4 Personality Traits and Knowledge Sharing Behavior

Knowledge sharing is not only a behavior but also a process through which two or more individuals communicate (Jadin et al., 2012). Since two or more people are involved in KSB therefore personalities of those individuals involved in this communication process will also play a role. Personality of an individual plays a vital role in determining the behavior of an individual and that is why over a long period, personality has been studied as an instrument to know the behavior of humans (Chen, 2011). One of the areas of personality on which different studies focused is trait theories (Kassarjian, 1971). These traits control the certain behavior of individuals and based on the level of degree to which they control or influence the behavior, they are classified (Allport, 1961).

Traits which were used in this research work are Big Five (John and Srivastava, 1999) namely (1) Extraversion (2) Agreeableness (3) Conscientiousness (4) Neuroticism (5) Openness to Expereince. Reason for selecting these five factors is that "*there is general agreement that it serves as a useful integrative framework for thinking about individual differences at a fairly high level of abstraction*" (Baumgartner, 2002).

Since personality influences the behavior of an individual therefore it is hypothesized that:

***H$_{1}$**: Personality traits affect KSB of SEs.*
***H$_{1a}$**: Personality traits affect EKDB of SEs.*
***H$_{1b}$:** Personality traits affect EKCB of SEs.*
***H$_{1c}$:** Personality traits affect IKDB of SEs.*

***$H_{1d}$*: *Personality traits affect IKCB of SEs.***

In general, all these hypotheses were supported through the results obtained from this research. Table 6-6 (Appendix Q) shows the results of hypotheses between personality and KSB. Strong correlation and variance was found between personality and EKDB (R Square = 0.768, R Square change = 76.8%). Similarly, for personality and EKCB (R Square = 0.764, R Square change = 76.4%), personality and IKDB (R Square = 0.750, R Square change = 75%) and personality and IKCB (R Square = 0.768, R Square change = 76.8%). All relationships showed positive and strong correlation with each other. These results show that as hypothesized above, personality do have a positive and strong impact on KSB.

### 6.4.1 Openness to Experience and Knowledge Sharing Behavior

People with this trait likes to know more about things (curious), they are open minded and artistic in nature (Thoms, Moore and Scott, 1996). Additionally, such people show daring behaviors (McCrae and Costa, 1987). Since these people are curious in nature, they are open minded so they would like to know more about different things. SEs with such characteristics would like to share their experiences with others and would expect the same reciprocally. Based on this, hypotheses were as follows:

***$H1_{1}$***: *Openness to Experience positively affect KSB of SEs.*
***$H1_{1a}$***: *Openness to Experience positively affect EKDB of SEs.*
***$H1_{1b}$:*** *Openness to Experience positively affect EKCB of SEs.*
***$H1_{1c}$:*** *Openness to Experience positively affect IKDB of SEs.*
***$H1_{1d}$:*** *Openness to Experience positively affect IKCB of SEs.*

Results (Appendix E) show that overall openness to experience has a positive effect on EKDB ($p=0.002<.05$, beta = 0.21), EKCB ($p = 0.001<.05$, beta = 0.225), IKDB ($p = 0.010$, beta = 0.188) and no significant impact on IKCB ($p = 0.060>0.05$, beta = 0.131). These results do support above hypotheses that openness to experience have a significant impact on KSB. However, further research needs to be done in order to see that why openness to experience do not have significant impact on IKCB. One reason might be that since implicit knowledge is not easily available as it resides in the minds of people as compare to explicit knowledge, which is easily available, so when implicit knowledge is not easily available or shared then its collection will not be easy as well. That is why openness to experience does not show significant impact on IKCB. In contrast, since Malaysian SEs are moderate in openness to experience (mean = 3.63) as shown in table 4-1 (Chapter 4), this means that Malaysia SEs are not narrow minded, they are somewhat curious (because of moderate score on openness to experience), that is why they have higher KSB. Also, people with openness to experience, tries to share their knowledge in order to get new knowledge from others in return as mentioned in social exchange theory (Blau, 1964).

### 6.4.2 Neuroticism and Knowledge Sharing Behavior

People with neuroticism as their personality trait are emotionally unstable. One can observe unease, tension and sad behavior in them (Benet-Martinez and John, 1998). Besides, they also feel afraid, guilty and can be easily disturbed (Lin and Wang, 2012). Based on these negative characteristics, those individual who have these characteristics will hesitate to share their knowledge because their emotional instability may restrict them to cooperate with other team members (Watson and Tellegen, 1985). Feeling of insecurity may also stop them from sharing knowledge (Hsu et al., 2007). And as we know that most of the projects in Software Engineering field are now team based or project based so KSB will be effected negatively in this case. Therefore the hypotheses in this research are:

***$H1_2$***: *High Neuroticism negatively affect KSB of SEs.*
***$H1_{2a}$***: *High Neuroticism negatively affect EKDB of SEs.*
***$H1_{2b}$:*** *High Neuroticism negatively affect EKCB of SEs.*
***$H1_{2c}$:*** *High Neuroticism negatively affect IKDB of SEs.*
***$H1_{2d}$:*** *High Neuroticism negatively affect IKCB of SEs.*

Results (Appendix E) of hypotheses between neuroticism and KSB show that there is no relationship between these two variables (because of p values) but still there is an indication (based on beta values) that neuroticism has an impact on EKDB ($p = 0.532>.05$, beta = -0.02), EKCB ($p = 0.250>.05$, beta = -.031), IKDB ($p = 0.312>.05$, beta = -.028) and IKCB ($p = 0.257>.05$, beta = -.03). All the above beta values show that neuroticism has a negative impact on KSB and p value shows that there is no significant relationship between neuroticism and KSB. Besides, since Malaysia SEs are low in neuroticism (mean = 2.68), which means that they will have high KSB. Since they are emotionally stable, not easily frustrated so such people can play a vital role as a team member, which can cause higher KSB. Sodiya et al., (2007) also reported that Software Engineers are low on neuroticism meaning that they will be high in KSB. Since all p values are greater than 0.05 level, therefore there is no evidence of strong relationship between neuroticism and KSB.

### 6.4.3 Conscientiousness and Knowledge Sharing Behavior

Conscientious people are dependable, consistent and goal oriented (Thoms, Moore and Scott, 1996). They are hardworking, reliable and responsible (Barrick and Mount, 1991). People who are high in conscientiousness trait are cooperative because group cohesiveness increases if the members of group are high in conscientiousness (Neuman, Wanger and Christiansen, 1999). This means that higher group cohesiveness will lead to more cooperation among group members and will increase the trust, which will ultimately cause higher KSB. Some other studies have also reported that conscientiousness people are likely to show higher KSB (Matzler, Renzl, Muller, Herting and Mooradian, 2008; Mooradian, Renzl and Matzler, 2006). Based on this discussion, it is hypothesized that:

***$H1_3$**: Conscientiousness positively affect KSB of SEs.*

***$H1_{3a}$**: Conscientiousness positively affect EKDB of SEs.*

***$H1_{3b}$**: Conscientiousness positively affect EKCB of SEs.*

***$H1_{3c}$**: Conscientiousness positively affect IKDB of SEs.*

***$H1_{3d}$**: Conscientiousness positively affect IKCB of SEs.*

Upon testing these hypotheses, results (Appendix E) show that conscientiousness has a positive impact on EKDB ($p = 0.013<0.05$, beta = 0.15), EKCB ($p = 0.004<0.05$, beta = 0.175), IKDB (p = 0.013<0.05, beta = 0.155) and IKCB (p = 0.001<0.05, beta = 0.192). All these results support above mentioned hypotheses that conscientiousness do have a significant impact on KSB as p<0.05 for all KSB dimensions and beta is positive as well. Since, Malaysian SEs show higher conscientiousness (mean = 3.68, table 4-1: Chapter 4), this indicates that they will have higher KSB as well. Individuals with higher conscientiousness show higher intrinsic motivation (like Organizational Citizenship Behavior), this higher internal motivation (Organizational Citizenship Behavior) is related to higher KSB (Lin, 2008). Thus people with high conscientiousness will lead to higher KSB as is the case with Malaysian SEs.

### 6.4.4 Extraversion and Knowledge Sharing Behavior

Extraversion people are those people who are social in nature (Besser and Shackelford, 2007). These people are full of energy and are enthusiastic. Besides they have positive attitude as well. These people are sociable; they like to work in teams and are cooperative. Their friendly, easy-going nature (Barrick and Mount, 1991; Costa and McCrae, 1992) will help them to have higher level of KSB because these individuals likes to be involved in group discussions and work as a team (Lin and Wang, 2012). Therefore, hypotheses for extraversion and KSB are:

***$H1_4$****: Extraversion positively affect KSB of SEs.*
***$H1_{4a}$****: Extraversion positively affect EKDB of SEs.*
***$H1_{4b}$*****: Extraversion positively affect EKCB of SEs.***
***$H1_{4c}$*****: Extraversion positively affect IKDB of SEs.***
***$H1_{4d}$*****: Extraversion positively affect IKCB of SEs.***

Table 4-1 (Chapter 4) shows that Malaysia SEs are high in extraversion trait (mean = 3.78). This shows that they are friendly, easygoing, sociable, enthusiastic and positive about their attitudes. Since all the characteristics show positive attributes so such persons should have higher level of KSB since they like to work with others and are friendly. Results (Appendix E) of hypotheses also show that extraversion positively influences EKDB (p = 0.000<.05, beta = 0.28), EKCB (p = 0.000<.05, beta = 0.264), IKDB (p = 0.000<.05, beta = 0.297) and IKCB (0.000<.05, beta = 0.324).

All these p and beta values show that extraversion positively and significantly influences KSB of Malaysian SEs. Thus all the above hypotheses between extraversion and KSB are supported. Results of this research on this trait are different from previous studies. Like Sodiya et al., (2007) reported that most of the Software Engineering categories are low on extraversion trait which will result in lower KSB. However, in our case, Software Engineers are high in extraversion trait resulting in higher KSB. This difference in results can be explained due to difference of culture in which both studies were conducted. This research was conducted in Malaysia whereas the study by Sodiya et al., (2007) was conducted on Nigerian Software Engineers. This difference of cultures may explain difference in personality traits.

### 6.4.5 Agreeableness and Knowledge Sharing Behavior

People who are high in agreeableness are helpful and cooperative with others (Barrick and Mount, 1991). They are supportive, tolerant and conflict avoiders (Costa and McCrae, 1992). Since these people avoid conflicts, are supportive, it is assumed that they will have a good working relationship with their colleagues and will result in higher level of KSB. As reported by Matzler et al., (2008) and Mooradian, Renzl and Matzler, (2006) that those people who are high in agreeableness trait are likely to share more knowledge as compare to those who are low on this trait. Therefore, it is hypothesized that:

***$H1_5$**: Agreeableness positively affect KSB of SEs.*
***$H1_{5a}$**: Agreeableness positively affect EKDB of SEs.*
***$H1_{5b}$**: Agreeableness positively affect EKCB of SEs.*
***$H1_{5c}$**: Agreeableness positively affect IKDB of SEs.*
***$H1_{5d}$**: Agreeableness positively affect IKCB of SEs.*

Table 4-1 (Chapter 4) shows that Malaysia SEs are moderate in agreeableness (mean = 3.63). This means that Malaysian SEs likes to avoid conflicts and they are supportive in nature. Their supportive nature will help them to have higher KSB. Results (Appendix E) of hypotheses testing also validates the findings that Malaysian SEs who are high in agreeableness do have higher level of EKDB ($p = 0.000 < .05$, beta = 0.30), EKCB (p = 0.000<.05, beta = 0.272), IKDB (p = 0.000<.05, beta = 0.291) and IKCB (p = 0.000<.05, beta = 0.295). All these p and beta values show that agreeableness do have a significant and positive influence on KSB of Malaysian SEs. Results of this research strengthens the relationship between agreeableness and KSB discussed in other studies conducted previously. For example, Srinivasan (2009) concluded that those individuals who are sympathetic, friendly and trust worthy (all are characteristics of agreeableness) are more willing to share their knowledge. Thus based on the results of this research and previous literature, all above hypotheses are supported.

### 6.5 Moderating Role of PEOU and PU for Knowledge Sharing Technology between Work Design Characteristics, Personality Traits and KSB

Knowledge sharing is now a common practice within organizations because it is crucial for the competitive advantage of an organization (Argote and Ingram, 2000; Tagliaventi, Bertolotti and Macri, 2010). It is crucial because knowledge sharing helps to create collective knowledge (Cabrera, Collins and Salgado, 2006; Grant, 1996; Liu and Phillips, 2011; Nahapiet and Ghoshal, 1998) which ultimately benefits organization in many ways like improving processes and coming up with new ideas regarding product development. However, to have KSB among organizational members, it is important to understand the factors that can influence KSB (Chen, Chuang and Chen, 2012). Till now, different factors have been studied which can effect KSB (Yang and Chen, 2005).

One of the factors which have been studied is technology. Technology is one of the key enablers for KM implementation in an organization because it directly and indirectly influences KSB (Hendriks, 1999; Lee and Suliman, 2002) and KSB is a key factor for the successful implementation of KM. This means that without proper KSB, successful KM implementation will be very hard. This was also emphasized by Shin, (2004b); King, Marks and McCoy, (2002) and Hendriks, (1999) when they said that KSB is one of most important purpose for effective KM. There are various studies which have found that Information and Communication Technology (ICT) do have an impact on KSB. Like, Bolisani and Scarso, (1999) found various ICTs which are effective for knowledge sharing within an organization. Kulkarni, Ravindran and Freeze, (2007) found another factor (Information System (IS) quality, also related to Information Technology (IT)) which can effect KSB whereas one of the dimensions to measure these KM System's (KMS) (IT based system (Chen, Chuang and Chen, 2012)) quality is their ease of use (Chen, Chuang and Chen, 2012).

Chen, Chuang and Chen, (2012) also indirectly pointed towards usefulness of these KMS when they say that "*If the KMS quality is adequate and meets the employee's needs (***usefulness***), the extra effort required to find and use knowledge will be reduced. In addition, if organizational members can find valuable and useful knowledge (***usefulness***) using KMS….*".

The use of technology to share knowledge depends on the perception of individuals towards that technology. Perception can be measured through PEOU and PU. It is important to study perceived usefulness and perceived ease of use for knowledge sharing technology because "*overall, empirical research on KMS related issues (***their usefulness and ease of use in our case***) is still limited……and little is known about the implications of the inter-relationships between KMS factors and the organizational factors (***relationship between PEOU, PU and work design characteristics in this case***) that influence knowledge sharing behaviors in networks and across unit levels*" (Chen, Chuang and Chen, 2012). Therefore, ease of use and usefulness of Knowledge Sharing Technology are important factors to study because of their significance not only towards knowledge sharing systems but also towards the quality of KMS.

Various researchers have studied the moderating role of IT between KSB and different factors. For example, Liang, Liu and Wu, (2008) examined the moderating role of "*IT context"* between individual's KSB, personal, interpersonal and organizational/environmental factors. Their study gave mixed results when "*IT context"* was used as a moderating variable. Like, the hypotheses between organizational commitment and KSB, social interaction and KSB, trust and KSB were supported when "*IT context"* was used as a moderating variable. On the other hand, hypotheses between perceived benefit and KSB, organizational support and KSB and reward systems and KSB were not supported when "*IT context*" was used as a moderating variable. Lin, (2007a) also hypothesized that IT positively impacts the willingness of an individual to share or collect knowledge. Results of the study were also mixed and reported that ICT do have a positive impact on knowledge collection whereas hypothesis between knowledge donation and ICT use was not supported.

Dimensions used in this research to see the effect of ICT on KSB are perceived ease of use and perceived usefulness. Reason being that if employees perceive that the technology, which is being used by their organization, is useful for them (it helps them to perform their job better) and it is easy to use only then they will use that technology to share or collect knowledge. Otherwise, if the technology for knowledge sharing is difficult to use and it is not useful, it has no positive effect on their job, employees will not use that technology or the use will be limited. According to Technology Acceptance Model as well, PEOU and PU also plays a role in accepting a technology (in our case Knowledge Sharing Technology). Besides, ICT provide access to knowledge, which is not equivalent to application or use of knowledge. Therefore, knowledge sharing does not only involve ICT usage, it involves other factors as well like social and human interaction (Lin, 2007a). This means that ICT should not be used in isolation, in fact, it should be studied with other factors in order to see the actual impact on KSB. In addition, ICT is an important predecessor for commitment (Foy, 1994; Meyer and Allen, 1997; Postmes, Tanis and DeWit, 2001) which shows that ICT can increase the commitment of an individual to share knowledge but commitment and actual behavior are two different things. Therefore, it was hypothesized that:

***$H_{3a}$*:** *PEOU moderates the relationship between personality traits and EKDB, EKCB (**$H_{3b}$**), IKDB (**$H_{3c}$**) and IKCB (**$H_{3d}$**) of SEs.* ***[Accepted]***

***$H_{4a}$*:** *PU moderates the relationship between personality traits and EKDB, EKCB (**$H_{4b}$**), IKDB (**H4c**), and IKCB (**$H_{4d}$**) of SEs.* ***[Accepted]***

***$H_{5a}$*:** *PEOU and PU moderates the relationship between personality traits and EKDB, EKCB (**$H_{5b}$**), IKDB (**H5c**), and IKCB (**$H_{5d}$**) of SEs.* ***[Accepted]***

***$H_{6a2}$:*** *PEOU moderates the relationship between task characteristics and EKDB, EKCB (**$H_{6a3}$**), IKDB (**$H_{6a4}$**), and IKCB (**$H_{6a5}$**) of SEs.* ***[Accepted]***

***$H_{7a2}$****: PU moderates the relationship between task characteristics and EKDB, EKCB ($H_{7a3}$), IKDB (**$H_{7a4}$**), and IKCB (**$H_{7a5}$**) of SEs.* ***[Accepted]***

***$H_{8a2}$****: PEOU and PU moderates the relationship between task characteristics and EKDB, EKCB ($H_{8a3}$), IKDB (**$H_{8a4}$**), and IKCB (**$H_{8a5}$**) of SEs.* ***[Accepted]***

***$H_{6b2}$:*** *PEOU moderates the relationship between knowledge characteristics and EKDB, EKCB ($_{H6b3}$), IKDB (**$H_{6b4}$**), and IKCB (**$H_{5b5}$**) of SEs.* ***[Accepted]***

***$H_{7b2}$:*** *PU moderates the relationship between knowledge characteristics and EKDB, EKCB (**$H_{7b3}$**), IKDB (**$H_{7b4}$**), and IKCB (**$H_{7b5}$**) of SEs.* ***[Accepted]***

***$H_{8b2}$****: PEOU and PU moderates the relationship between knowledge characteristics and EKDB, EKCB ($H_{8b3}$), IKDB (**$H_{8b4}$**), and IKCB (**$H_{8b5}$**) of SEs.* ***[Accepted]***

***$H_{6c2}$:*** *PEOU moderates the relationship between social characteristics and EKDB, EKCB (**$H_{6c3}$**), IKDB (**$H_{6c4}$**), and IKCB (**$H_{6c5}$**) of SEs.* ***[Accepted]***

***$H_{7c2}$:*** *PU moderates the relationship between social characteristics and EKDB, EKCB (**$H_{7c3}$**), IKDB (**$H_{7c4}$**), and IKCB (**$H_{7c5}$**) of SEs.* ***[Accepted]***

***$H_{8c2}$****: PEOU and PU moderates the relationship between social characteristics and EKDB, EKCB (**$H_{8c3}$**), IKDB (**$H_{8c4}$**), and IKCB (**$H_{8c5}$**) of SEs.* ***[Accepted]***

***$H_{6d2}$:*** *PEOU moderates the relationship between contextual characteristics and EKDB, EKCB (**$H_{6d3}$**), IKDB (**$H_{6d4}$**), and IKCB (**$H_{6d5}$**) of SEs.* ***[Accepted]***

***$H_{7d2}$:*** *PU moderates the relationship between contextual characteristics and EKDB, EKCB (**$H_{7d3}$**), IKDB (**$H_{7d4}$**), and IKCB (**$H_{7d5}$**) of SEs.* ***[Accepted]***

***$H_{8d2}$**: PEOU and PU moderates the relationship between contextual characteristics and EKDB, EKCB (**$H_{8d3}$**), IKDB (**$H_{8d4}$**), and IKCB (**$H_{8d5}$**) of SEs.* ***[Accepted]***

Results of all these hypotheses show that they are supported, which means that perceived ease of use and perceived usefulness, do play a moderating role between work design characteristics, personality traits and KSB. However not all hypotheses which involve moderating effects are strongly supported. Although p values are less than 0.05 significance level but change in R-square and adjusted R-square values in some cases are very minor. Interestingly, all the hypotheses where POEU was used as a moderator, there was very less effect of moderation. However, more changes can be observed due to moderation of PU. This shows that PEOU and PU do act as moderators, in some cases as strong and in some as weak. These results are in line with some of the previous literature. For example, Liu, Liang, Rajagopalan, Sambamurthy and Wu, (2011) used "*IT facilitation*" as a moderator between individual factors, interpersonal factors and organizational factors and KSB. Results of their study showed that "*IT facilitation*" do not have a moderating effect between individual characteristics whereas for organizational factors, they had mixed results. Moderation was found between organizational support and KSB while not between reward system and KSB. Bock and Kim, (2002) also used "*Level of IT usage*" as a moderating variable between intention to share knowledge and KSB. Their study also showed that IT did not played a moderating role. However, they suggested that construct of IT usage may be used with more different types of IS.

Results of this research also have the same phenomenon. PEOU and PU for knowledge sharing technology have mix moderating effects. For some, weak moderation is found while for others, strong moderation is found. One reason behind weak moderating effect between most of the personality traits, work design characteristics and KSB is that IT does not provide too much facilitation for social interaction (Van Den Hooff and De Ridder, 2004) as compared to face-to-face interaction. Besides, it is also difficult to reach to a common understanding and solving complex problems through IT (Liu, Liang, Rajagopalan, Sambamurthy and Wu, 2011) as compare to face-to-face interaction. Another factor for mix moderating role of knowledge sharing technology is that before knowledge is shared through ICT, it has to be codified which requires extra time and effort from the individual besides performing the actual task or job. This may also reduce KSB (Liu, Liang, Rajagopalan, Sambamurthy and Wu, 2011) as no employee would like to perform those activities, which may affect their job. Also, since respondents in this research were Software Engineers, who have specialized skills and expertise in their profession, therefore they might not consider tools and software used in their profession as difficult. For them, usefulness might be more important rather than ease of use of technology.

## 6.6 Summary of Chapter

This chapter carried out discussion on the results of work design characteristics and personality traits of Malaysian Software Engineers. In addition, discussion on the results obtained through hierarchical multiple regression analysis was also part of this chapter. Hypotheses were analyzed that whether they are in accordance with the assumptions made in chapter 3 or not. Discussion was carried out on relationships between task, knowledge, social and contextual characteristics and EKDB, EKCB, IKDB and IKCB. Also discussed in this chapter are the relationships between personality traits (extraversion, neuroticism, openness to experience, agreeableness and conscientiousness) and KSB. Moderating roles of PEOU and PU between personality traits, work design characteristics and KSB were also discussed in this chapter.

CHAPTER 7

CONCLUSION

## 7.0 Overview

This chapter is summary of the entire research. The first section of this chapter explains how research objectives which are mentioned in chapter 1 are successfully achieved. In addition, this chapter provides the contributions of current research work. Besides, limitations of this research are also mentioned. Additionally, future directions, theoretical and practical implications are also discussed at the end of this chapter.

## 7.1 Research Objectives

This research work was carried out to meet the following objectives:

1. Identifying personality traits (Objective 1) and evaluating their effect on Knowledge Sharing Behavior of Malaysia Software Engineers (Objective 2).

   Big Five personality traits were used to know about the personality of Malaysian Software Engineers (SEs). Results are reported in chapter 4. Effect of these personality traits on SE's Knowledge Sharing Behavior (KSB) was also analyzed through hypotheses testing. Results of these hypotheses are reported in chapter 4 whereas results are discussed in chapter 6. Results showed that personality traits do have an impact on KSB of SEs.

2. Identifying work design characteristics (Objective 3) and analyzing their impact on Knowledge Sharing Behavior of Malaysian Software Engineers (Objective 4).

   Work design characteristics of Malaysian SEs were identified with the help of work design characteristics mentioned by Morgeson and Humphrey, (2006). These work design characteristics were categorized into motivational (task and knowledge characteristics); social and contextual characteristics. In addition, impact of these work design characteristics was also analyzed on KSB of Malaysian SEs. Results are reported in chapter 5 and discussed in chapter 6. Results showed that work design characteristics (task, knowledge, social and contextual characteristics) have an impact on KSB of SEs.

3. Examining the role of technology acceptance perception for Knowledge Sharing Behavior among Malaysian Software Engineers (objective 5).

   Role of technology was also analyzed in this research work. Technology was considered to be a key enabler for KM implementation and KSB. This study tested the moderating role of technology perception through Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). Results are reported in chapter 4 and 5 and discussed in chapter 6. Results indicate that PEOU and PU has a moderating role between personality traits, work design characteristics and KSB.

4. Proposing and validating framework for increasing Knowledge Sharing Behavior among Malaysian Software Engineers through personality, work design and technology acceptance perception (objective 6).

   Outcomes of objectives 1,2,3,4,5 fulfill this objective (objective 6). Based on the hypotheses developed through literature review, a framework was developed which is reported in chapter 3 (section 3.5). However, upon analysis this framework was validated through hierarchical multiple regression method. Final framework with results is as follows:

**Knowledge Sharing Framework for Software Engineers (KSFSE)**

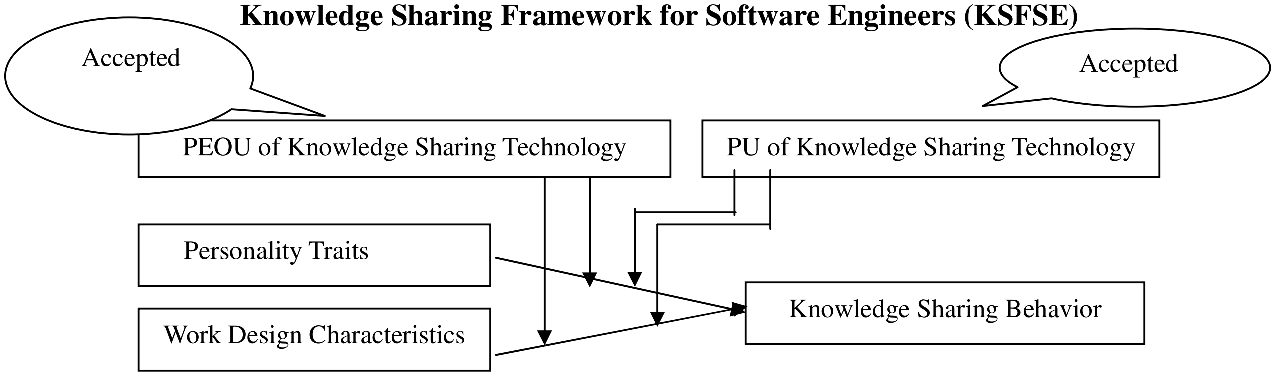


Figure 7-1: Validated Framework

The above framework will help top management in Malaysian software industry to foster KSB among Software Engineers. Validation of the framework shows that if proper personality traits (e.g., high openness to experience, high extraversion, low neuroticism, high conscientiousness and high agreeableness) are applied with working environment which is suitable (proper feedback from job, high skill variety, high received interdependence etc.), then there are higher chances of KSB. Similarly, technology which is provided in the organization for knowledge sharing purpose, if it is easy to use (Perceived Ease of Use) and it is useful (Perceived Usefulness), then people will be more motivated to use this technology which will again result in higher knowledge sharing behavior.

### 7.2 Contributions of Research Work

All the objectives which were stated in chapter 1 are fulfilled. Contributions of this study will help top management in software development industry of Malaysia to understand the personality traits, work design characteristics and KSB of Software Engineers. Understanding personality traits and work design characteristics and how they impact KSB is very useful for this industry in such a way that KSB can be increased by hiring people with right personality traits. Similarly, designing work in such a way that it makes the job more interesting will help to foster KSB. This study contributed to the body of knowledge through the following ways:

1. One of the contributions of this research is that KSB among SEs was further categorized into explicit, implicit, donation and collection dimensions in one

study. This gives a more detailed view about impact of personality traits and work design characteristics on Explicit Knowledge Donation Behaviour (EKDB); Explicit Knowledge Collection Behaviour (EKCB); Implicit Knowledge Donation Behaviour (IKDB) and Implicit Knowledge Collection Behaviour (IKCB).

2. Personality traits of Malaysian SEs were identified based on Big Five Personality traits. Earlier, there are lack of studies on personality traits of Malaysian SEs.

3. Impact of personality traits was analyzed on Knowledge Sharing Behavior (EKDB, EKCB, IKDB and IKCB) of Malaysian Software Engineers.

4. Work design characteristics of Malaysian SEs were also identified. These were identified through work design characteristics by Morgeson and Humphrey, (2006). These work design characteristics cover three main aspects of work and they are further sub-divided into different dimension (total dimensions: 21). The work done previously in software engineering, has not used these work design characteristics and focused more towards JCM which covers only five dimensions of work.

5. Impact of work design characteristics on Malaysian Software Engineer's Knowledge Sharing Behavior (EKDB, EKCB, IKDB and IKCB) was analyzed.

6. Moderating role of technology acceptance perception through Perceived Ease of Use and Perceived Usefulness was analyzed between personality traits, work design characteristics and Knowledge Ssharing Behavior (EKDB, EKCB, IKDB and IKCB).

7. Twenty-Eight items for measuring Knowledge Sharing Behavior of Software Engineers were developed by the author of this research based on the type of knowledge those SEs (software coders in this case) should possess as mentioned in SWEBOK, (2004).

## 7.3 Limitations of Research Work

Although this research work tried to give a true picture of the situation and author tried to do his best to do every possible effort to carry out this work in the best possible way but still there were some limitations. Following were the main limitations of the research:

Random cluster and simple random sampling techniques were used in this research. Therefore, if there are too many variations in the working environment or even if there is change of personality traits between SEs based on their geographical location, then results may vary.

As this research is about behaviour which may vary based on the situation in which a person was at the time data was being collected, therefore, longitudinal studies should also be considered to predict the behavior of SEs. However, as this research had time constraints therefore longitudinal research was not possible.

## 7.4 Recommendations and Future Work

Based on the limitations, there are certain recommendations which should be carried out for future work. As this research work used cluster sampling technique therefore results should be generalized carefully to the whole population (SEs) because of the changes in the personality traits due to different geographical locations. In future, researchers should try to use other probabilistic sampling techniques as well including cluster sampling (for other geographical areas) to validate the results of this study. Another future work which can be carried out is to replicate this research work through longitudinal method. Data should be collected at more than one time and then results should be analyzed in order to see the behavioral pattern of SEs.

Further future work may include analyzing the impact of personality on KSB of Malaysian SEs through cultural difference. Since Malaysia is a country with diverse cultures (Malays, Chinese and Indians) therefore it will be interesting to see the difference of personality traits among Malaysian SEs and how they are involved in activities related to KSB based on the ethnicity. Also as Malaysia is a multi-cultural country, it will be interesting to see how individuals from various cultures perceive their work design characteristics and then what will be the impact on KSB.

## 7.5 Theoretical Implications

This study focused on the knowledge sharing behavior of Software Engineers. However, to the best of author's knowledge, there is no instrument to measure knowledge sharing behavior of Software Engineers based on the knowledge or skills required in this profession. Since, knowledge sharing is very important for Software Engineers as discussed in chapter 1 and 2, therefore, there is a need to come up with an instrument to measure KSB of Software Engineers. Otherwise, if there is no instrument then researchers may not be able to assess the actual KSB and they may use general questions which may not be very useful. For example, for Software Engineers, asking questions like "*do you share knowledge with your colleagues?*" may not be useful as compared to asking questions like "*Do you share reports about software coding, software reuse and software development best practices?*". Therefore, this research came up with instrument to measure the knowledge sharing behavior of Software Engineers (software coders) based on the knowledge (software coding, software reuse and documentation) they require and use.

## 7.6 Practical Implications

This study is based on the personality traits and work design characteristics of Malaysian Software Engineers. Outcomes of this particular work can be applied in the software industry to increase KSB among SEs. First outcome of this study is the understanding about personality traits. Research shows that to hire a person, his/her personality traits should be considered as one of the criteria because this provides a better job-fit between job and individual. And also, personality do has an impact on KSB. Therefore, individuals with proper job-fit will perform better on their jobs and their personality traits will also help in better KSB. Similarly, work design characteristics also has an important role to play for fostering or hindering KSB. Good working environment will increase the chances of higher KSB and vice versa.

Therefore, Software Engineers with right mix of personality traits and positive work design characteristics will benefit their team and organization in such a way that when KSB among SEs will increase, the overall knowledge in the organization will increase (through sharing personal experiences, lessons learned previously etc.) and employees will learn new knowledge. This will be beneficial both financially and non-financially to individuals, teams and organization.

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**APPENDIX A – Publications**

## CONFERENCE PROCEEDINGS

1. **Mobashar Rehman,** Ahmad Kamil B Mahmood, Rohani Salleh, Aamir Amin (2014), "Work Design Characteristics and Knowledge Sharing Behavior among Software Engineers", The 2nd International Conference on Computer and Information Sciences (ICCOINS), 3 – 5 June, 2014, Kuala Lumpur Convention Centre, Malaysia, Status: Accepted for Oral Presentation

2. **Mobashar Rehman,** Ahmad Kamil B Mahmood, Rohani Salleh, Aamir Amin (2012), "Mapping Job Requirements of Software Engineers to Big Five Personality Traits", ICCIS, 12-14 June, 2012, Kuala Lumpur, Malaysia [SCOPUS Indexed].

## JOURNAL PAPERS

1. **Mobashar Rehman,** Ahmad Kamil B Mahmood, Rohani Salleh, Aamir Amin (2014), "Framework to Increase Knowledge Sharing Behavior among Software Engineers", *Research Journal of Applied Sciences, Engineering and Technology.* 7(4), 849-856, [Elsevier (SCOPUS) Indexed].

2. **Mobashar Rehman**, Ahmad Kamil B Mahmood, Rohani Salleh, Aamir Amin (2010), "Review of Factors Affecting Knowledge Sharing Behavior", Journal of International Proceedings of Economic Development and Research (IPEDR), vol. 3, pp. 223 - 227.

## APPENDIX B – Questionnaire

### SURVEY ON WORK CHARACTERISTICS, PERSONALITY and KNOWLEDGE SHARING OF SOFTWARE DEVELOPERS

To ensure your confidentiality, no specific questions are asked regarding your identity and the results will not be shared with any other person in any case. This survey will **ONLY** be used for academic research purpose.

**Completion Time** --- This questionnaire will take about **30 minutes** to be completed.

**Scale Used for section II – VI:**

| Strongly Disagree **SD** | Disagree **DA** | Neither Disagree nor Agree **N** | Agree **A** | Strongly Agree **SA** |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

# SECTION I – DEMOGRAPHIC QUESTIONS

1. Gender: ☐ Male ☐ Female

2. Employment status: ☐ Permanent ☐ Contract

3. Ethnicity: ☐ Malay ☐ Chinese
   ☐ Indian ☐ Others (Please mention: __________)

4. Highest education gained: ☐ Diploma ☐ Professional Certification
   ☐ First degree ☐ Master degree or above
   ☐ Others (Please mention: __________________)

5. Work schedule: ☐ Regular (8:30 am – 4:30 pm) ☐ Flexible working hours

6. Work location: ☐ Perak ☐ Penang
   ☐ Kuala Lumpur ☐ Others (Please mention: __________)

7. Years of experience in software development:

   ☐ Less than 2 ☐ 2-5
   ☐ 6-9 ☐ 10 or above

8. Which of the following do you mostly use for software development (**tick ONE only**)?

   ☐ Agile (Extreme Programming, Pair Programming, Scrum etc)
   ☐ Other (Waterfall, Spiral, Prototype, Incremental etc)

## SECTION II - WORK DESIGN CHARACTERISTICS

### A. TASK CHARACTERISTICS

9. How strongly you **AGREE or DISAGREE** with the following statements about your **CURRENT** job?

| **My job allows me to...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... make my own decisions about how to schedule my work. | 1 | 2 | 3 | 4 | 5 |
| ... decide on the order in which things are done on the job. | 1 | 2 | 3 | 4 | 5 |
| ... plan how I do my work. | 1 | 2 | 3 | 4 | 5 |
| ... use my personal initiative or judgment in carrying out the work. | 1 | 2 | 3 | 4 | 5 |
| ... make a lot of decisions on my own. | 1 | 2 | 3 | 4 | 5 |
| ... make decisions about what methods I use to complete my work. | 1 | 2 | 3 | 4 | 5 |
| ... decide on my own how to go about doing my work. | 1 | 2 | 3 | 4 | 5 |
| ... complete work I start. | 1 | 2 | 3 | 4 | 5 |

| **My job ...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... provides me with significant autonomy in making decisions. | 1 | 2 | 3 | 4 | 5 |
| ... gives me considerable opportunity for independence and freedom in how I do the work. | 1 | 2 | 3 | 4 | 5 |
| ... requires the performance of a wide range of tasks. | 1 | 2 | 3 | 4 | 5 |
| ... itself is very significant and important in the broader scheme of things. | 1 | 2 | 3 | 4 | 5 |
| ... has a large impact on people outside the organization. | 1 | 2 | 3 | 4 | 5 |
| ... is arranged so that I can do an entire piece of work from beginning to end. | 1 | 2 | 3 | 4 | 5 |
| ... provides me the chance to completely finish the pieces of work I begin. | 1 | 2 | 3 | 4 | 5 |
| ... itself provides feedback on my performance. | 1 | 2 | 3 | 4 | 5 |
| ... itself provides me with information about my performance. | 1 | 2 | 3 | 4 | 5 |

| **My job involves...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... a great deal of task variety. | 1 | 2 | 3 | 4 | 5 |
| ... doing a number of different things. | 1 | 2 | 3 | 4 | 5 |
| ... completing a piece of work that has an obvious beginning and end. | 1 | 2 | 3 | 4 | 5 |
| ... performing a variety of tasks. | 1 | 2 | 3 | 4 | 5 |

| | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| The results of my work are likely to significantly affect the lives of other people. | 1 | 2 | 3 | 4 | 5 |
| The work performed by me on the job has a significant impact on people outside the organization. | 1 | 2 | 3 | 4 | 5 |
| The work activities themselves provide direct and clear information about the effectiveness (e.g. quality and quantity) of my job performance. | 1 | 2 | 3 | 4 | 5 |

## B. KNOWLEDGE CHARACTERISTICS

| **My job...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... involves performing relatively simple tasks. | 1 | 2 | 3 | 4 | 5 |
| ... involves solving problems that have no obvious correct answer. | 1 | 2 | 3 | 4 | 5 |
| ... often involves dealing with problems that I have not met before. | 1 | 2 | 3 | 4 | 5 |
| ... comprises relatively uncomplicated tasks. | 1 | 2 | 3 | 4 | 5 |
| ... is highly specialized in terms of purpose, tasks, or activities. | 1 | 2 | 3 | 4 | 5 |
| | SD | DA | N | A | SA |
| The tasks on my job are simple and uncomplicated. | 1 | 2 | 3 | 4 | 5 |
| The tools, procedures and materials used on my job are highly specialized in terms of purpose. | 1 | 2 | 3 | 4 | 5 |

| **My job requires...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... that I only do one task or activity at a time. | 1 | 2 | 3 | 4 | 5 |
| ... me to monitor a great deal of information. | 1 | 2 | 3 | 4 | 5 |
| ... that I engage in a large amount of thinking. | 1 | 2 | 3 | 4 | 5 |
| ... me to keep track of more than one thing at a time. | 1 | 2 | 3 | 4 | 5 |
| ... me to analyze a lot of information. | 1 | 2 | 3 | 4 | 5 |
| ... me to be creative. | 1 | 2 | 3 | 4 | 5 |
| ... unique ideas or solutions to problems. | 1 | 2 | 3 | 4 | 5 |
| ... a variety of skills. | 1 | 2 | 3 | 4 | 5 |
| ... me to utilize a variety of different skills in order to complete the work. | 1 | 2 | 3 | 4 | 5 |
| ... me to use a number of complex or high-level skills. | 1 | 2 | 3 | 4 | 5 |
| ... the use of a number of skills. | 1 | 2 | 3 | 4 | 5 |
| ... very specialized knowledge and skills. | 1 | 2 | 3 | 4 | 5 |
| ... a depth of knowledge and expertise. | 1 | 2 | 3 | 4 | 5 |

## C. SOCIAL CHARACTERISTICS

| | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| I have the opportunity to develop close friendships in my job. | 1 | 2 | 3 | 4 | 5 |
| I have the chance in my job to get to know other people. | 1 | 2 | 3 | 4 | 5 |
| I have the opportunity to meet with others in my work. | 1 | 2 | 3 | 4 | 5 |
| My supervisor is concerned about the welfare of the people that work for him/her. | 1 | 2 | 3 | 4 | 5 |
| People I work with take a personal interest in me. | 1 | 2 | 3 | 4 | 5 |
| People I work with are friendly. | 1 | 2 | 3 | 4 | 5 |
| Other jobs depend directly on my job. | 1 | 2 | 3 | 4 | 5 |
| Unless my job gets done, other jobs cannot be completed. | 1 | 2 | 3 | 4 | 5 |
| I receive a great deal of information from my manager and co-workers about my job performance. | 1 | 2 | 3 | 4 | 5 |
| I receive feedback on my performance from other people in my organization (such as my manager or co-workers). | 1 | 2 | 3 | 4 | 5 |
| My job cannot be done unless others do their work. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| On the job, I frequently communicate with people who do not work for the same organization as I do. | 1 | 2 | 3 | 4 | 5 |
| Other people in the organization, such as managers and co-workers, provide information about the effectiveness (e.g., quality and quantity) of my job performance. | 1 | 2 | 3 | 4 | 5 |

| **My job...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... requires me to accomplish job before others complete their job. | 1 | 2 | 3 | 4 | 5 |
| ... activities are greatly affected by the work of other people. | 1 | 2 | 3 | 4 | 5 |
| ... depends on the work of many different people for its completion. | 1 | 2 | 3 | 4 | 5 |
| ... requires spending a great deal of time with people outside my organization. | 1 | 2 | 3 | 4 | 5 |
| ... involves interaction with people who are not members of my organization. | 1 | 2 | 3 | 4 | 5 |
| ... involves a great deal of interaction with people outside my organization. | 1 | 2 | 3 | 4 | 5 |

## D. ERGONOMIC CHARACTERISTICS

| **My job...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... has a low risk of accident. | 1 | 2 | 3 | 4 | 5 |
| ... takes place in an environment free from health hazards (e.g., chemicals, fumes, etc.). | 1 | 2 | 3 | 4 | 5 |
| ... occurs in a clean environment. | 1 | 2 | 3 | 4 | 5 |
| ... involves excessive reaching. | 1 | 2 | 3 | 4 | 5 |
| ... involves the use of a variety of different software. | 1 | 2 | 3 | 4 | 5 |
| ... involves the use of complex tools or technology. | 1 | 2 | 3 | 4 | 5 |
| ... requires a great deal of muscular endurance. | 1 | 2 | 3 | 4 | 5 |
| ... requires great deal of muscular strength. | 1 | 2 | 3 | 4 | 5 |
| ... requires lot of physical effort. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| My work place allows for all size differences between people in terms of clearance, reach, eye height, leg room, etc. | 1 | 2 | 3 | 4 | 5 |
| My work place is free from excessive noise. | 1 | 2 | 3 | 4 | 5 |
| The seating arrangements on my job are adequate (e.g., ample opportunities to sit, comfortable chairs, good postural support). | 1 | 2 | 3 | 4 | 5 |
| The climate at the work place is comfortable in terms of temperature and humidity. | 1 | 2 | 3 | 4 | 5 |
| A lot of time was required to learn the tools and softwares used on the job | 1 | 2 | 3 | 4 | 5 |

# SECTION III – PERSONALITY CHARACTERISTICS

10. How strongly you **AGREE or DISAGREE** with the following statements about yourself?

| **I am someone who is...** | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ...talkative. | 1 | 2 | 3 | 4 | 5 |
| ...reserved. | 1 | 2 | 3 | 4 | 5 |
| ...full of energy. | 1 | 2 | 3 | 4 | 5 |
| ...sometimes shy, inhibited. | 1 | 2 | 3 | 4 | 5 |
| ...outgoing, sociable. | 1 | 2 | 3 | 4 | 5 |
| ...helpful and unselfish with others. | 1 | 2 | 3 | 4 | 5 |
| ...generally trusting. | 1 | 2 | 3 | 4 | 5 |
| ...considerate and kind to almost everyone. | 1 | 2 | 3 | 4 | 5 |
| ...a reliable worker. | 1 | 2 | 3 | 4 | 5 |
| ...sometimes rude to others. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| ...easily distracted. | 1 | 2 | 3 | 4 | 5 |
| ...depressed, blue. | 1 | 2 | 3 | 4 | 5 |
| **I am someone who is...** | **SD** | **DA** | **N** | **A** | **SA** |
| ...relaxed, handles stress well. | 1 | 2 | 3 | 4 | 5 |
| ...emotionally stable, not easily upset. | 1 | 2 | 3 | 4 | 5 |
| ...original comes up with new ideas. | 1 | 2 | 3 | 4 | 5 |
| ...curious about many different things. | 1 | 2 | 3 | 4 | 5 |
| ...ingenious, a deep thinker. | 1 | 2 | 3 | 4 | 5 |
| ...inventive. | 1 | 2 | 3 | 4 | 5 |
| ...sophisticated in art, music, or literature. | 1 | 2 | 3 | 4 | 5 |

| **I am someone who ...** | **SD** | **DA** | **N** | **A** | **SA** |
|---|---|---|---|---|---|
| ...generates a lot of enthusiasm. | 1 | 2 | 3 | 4 | 5 |
| ...tends to be quiet. | 1 | 2 | 3 | 4 | 5 |
| ...has an assertive personality. | 1 | 2 | 3 | 4 | 5 |
| ...tends to find fault with others. | 1 | 2 | 3 | 4 | 5 |
| ...starts quarrels with others. | 1 | 2 | 3 | 4 | 5 |
| ...has a forgiving nature. | 1 | 2 | 3 | 4 | 5 |
| ...can be cold and aloof. | 1 | 2 | 3 | 4 | 5 |
| ...likes to cooperate with others. | 1 | 2 | 3 | 4 | 5 |
| ...does a thorough job. | 1 | 2 | 3 | 4 | 5 |
| ...can be somewhat careless. | 1 | 2 | 3 | 4 | 5 |
| ...tends to be disorganized. | 1 | 2 | 3 | 4 | 5 |
| ...tends to be lazy. | 1 | 2 | 3 | 4 | 5 |
| ...perseveres until the task is finished. | 1 | 2 | 3 | 4 | 5 |
| ...does things efficiently. | 1 | 2 | 3 | 4 | 5 |
| ...makes plans and follows through with them. | 1 | 2 | 3 | 4 | 5 |
| ...can be tense. | 1 | 2 | 3 | 4 | 5 |
| ...worries a lot. | 1 | 2 | 3 | 4 | 5 |
| ...can be moody. | 1 | 2 | 3 | 4 | 5 |
| ...remains calm in tense situations. | 1 | 2 | 3 | 4 | 5 |
| ...gets nervous easily. | 1 | 2 | 3 | 4 | 5 |
| ...has an active imagination. | 1 | 2 | 3 | 4 | 5 |
| ...values artistic, aesthetic experiences. | 1 | 2 | 3 | 4 | 5 |
| ...prefers work that is routine. | 1 | 2 | 3 | 4 | 5 |
| ...reflect, play with ideas. | 1 | 2 | 3 | 4 | 5 |
| ...has few artistic interests. | 1 | 2 | 3 | 4 | 5 |

## SECTION IV – KNOWLEDGE SHARING TECHNOLOGY PERCEPTION

11. How strongly you **AGREE or DISAGREE** that:

| using knowledge sharing technology... | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... improves the quality of work I do. | 1 | 2 | 3 | 4 | 5 |
| ... gives me greater control over my work. | 1 | 2 | 3 | 4 | 5 |
| ... increases my productivity. | 1 | 2 | 3 | 4 | 5 |
| ... improves my job performance. | 1 | 2 | 3 | 4 | 5 |
| **using knowledge sharing technology...** | **SD** | **DA** | **N** | **A** | **SA** |
| ... allows me to accomplish more work than would otherwise be possible. | 1 | 2 | 3 | 4 | 5 |
| ... enhances my effectiveness on the job. | 1 | 2 | 3 | 4 | 5 |
| …makes it easier to do my job. | 1 | 2 | 3 | 4 | 5 |
| Knowledge sharing technology enables me to accomplish tasks more quickly. | 1 | 2 | 3 | 4 | 5 |
| Knowledge sharing technology supports critical aspects of my job. | 1 | 2 | 3 | 4 | 5 |
| Overall, I find the knowledge sharing technology useful in my job. | 1 | 2 | 3 | 4 | 5 |
| I find knowledge sharing technology cumbersome to use. | 1 | 2 | 3 | 4 | 5 |
| I find it easy to get the knowledge sharing technology to do what I want to do. | 1 | 2 | 3 | 4 | 5 |
| I find it takes a lot of effort to become skilful at using knowledge sharing technology. | 1 | 2 | 3 | 4 | 5 |
| Learning to operate the knowledge sharing technology is easy for me. | 1 | 2 | 3 | 4 | 5 |
| Interacting with knowledge sharing technology is often frustrating. | 1 | 2 | 3 | 4 | 5 |
| The knowledge sharing technology is rigid and inflexible to interact with. | 1 | 2 | 3 | 4 | 5 |
| It is easy for me to remember how to perform tasks using the knowledge sharing technology. | 1 | 2 | 3 | 4 | 5 |
| Interacting with knowledge sharing technology requires a lot of mental effort. | 1 | 2 | 3 | 4 | 5 |
| My interaction with knowledge sharing technology is clear and understandable. | 1 | 2 | 3 | 4 | 5 |
| Overall, I find the knowledge sharing technology easy to use. | 1 | 2 | 3 | 4 | 5 |

# SECTION V – GENERAL KNOWLEDGE SHARING BEHAVIOR

12. How strongly you **AGREE or DISAGREE** with the following statements?

| I frequently share work reports and official documents... | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... with members of my organization. | 1 | 2 | 3 | 4 | 5 |
| ... that I prepare by myself with members of my organization. | 1 | 2 | 3 | 4 | 5 |

| I frequently share knowledge... | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... based on my experience with other organizational members. | 1 | 2 | 3 | 4 | 5 |
| ... of know-where or know-whom with other organizational members. | 1 | 2 | 3 | 4 | 5 |
| ... based on my expertise with other organizational members. | 1 | 2 | 3 | 4 | 5 |
| **I frequently collect work reports and official documents from...** | **SD** | **DA** | **N** | **A** | **SA** |
| ... members of my organization. | 1 | 2 | 3 | 4 | 5 |
| ...others that they prepare by themselves. | 1 | 2 | 3 | 4 | 5 |

| I frequently collect knowledge... | SD | DA | N | A | SA |
|---|---|---|---|---|---|
| ... from other organizational members based on their experience. | 1 | 2 | 3 | 4 | 5 |
| ... of know-where or know-whom with other organizational members. | 1 | 2 | 3 | 4 | 5 |
| ... from other organizational members based in their expertise. | 1 | 2 | 3 | 4 | 5 |

## SECTION VI –

## DEVELOPMENT SPECIFIC KNOWLEDGE SHARING BEHAVIOR

13. Please tick/circle how strongly you **AGREE or DISAGREE** that you **COLLECT** or **SHARE EXPLICIT** or **IMPLICIT** knowledge about the activities mentioned?

| ACTIVITIES | I **SHARE** reports and documents about ... | | | | | I **COLLECT** reports and documents about .... | | | | | I **SHARE** knowledge which **I** gained based on **MY** experience or expertise about ... | | | | | I **COLLECT** knowledge which **OTHERS** gained based on **THEIR** experience or expertise about ... | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SD | D | N | A | SA | SD | D | N | A | SA | SD | D | N | A | SA | SD | D | N | A | SA |
| ...translating software specifications into an executable code. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| ...various process models such as incremental, prototype, spiral etc., and of various programming paradigms (structured, assembly, procedural, object-oriented, and logic). | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| ...how to use source code development tools (IDEs) and specification to code translation tools. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| ...generating reusable code and about reusability of code. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| ...reusable libraries, off the shelf software components, module referencing, and software portability issues and techniques. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| ...writing comments on the code/program for understanding and preparing external program documentation. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| ...use of standardized documentation techniques during the software development process. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

Other comment you wish to add regarding the questionnaire, statements etc to help the researcher:

**THANK YOU FOR YOUR COOPERATION**

## APPENDIX C – Multicollinearity Test Results

### I. PERSONALITY FACTORS

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Agreeableness | .230 | 4.340 |
| | Conscientiousness | .195 | 5.134 |
| | Neuroticism | .914 | 1.094 |
| | Open_Exper | .194 | 5.154 |

a. Dependent Variable: Extraversion

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Conscientiousness | .224 | 4.461 |
| | Neuroticism | .914 | 1.094 |
| | Open_Exper | .173 | 5.786 |
| | Extraversion | .277 | 3.615 |

a. Dependent Variable: Agreeableness

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Neuroticism | .929 | 1.076 |
| | Open_Exper | .146 | 6.860 |
| | Extraversion | .282 | 3.543 |
| | Agreeableness | .271 | 3.696 |

a. Dependent Variable: Conscientiousness

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Open_Exper | .134 | 7.464 |
| | Extraversion | .262 | 3.816 |
| | Agreeableness | .218 | 4.581 |
| | Conscientiousness | .184 | 5.440 |

a. Dependent Variable: Neuroticism

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Extraversion | .380 | 2.635 |
| | Agreeableness | .282 | 3.552 |
| | Conscientiousness | .197 | 5.082 |
| | Neuroticism | .914 | 1.094 |

a. Dependent Variable: Open_Exper

## II. WORK CHARACTERISTICS

### A. TASK CHARACTERISTICS

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Des_Mal_Aut | .169 | 5.928 |
| | Work_Method_Aut | .165 | 6.045 |
| | Task_Var | .124 | 8.045 |
| | Task_Sig | .117 | 8.527 |
| | Task_Identity | .175 | 5.719 |
| | Feedbck_Job | .156 | 6.397 |

a. Dependent Variable: Work_Sch_Aut

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Work_Method_Aut | .175 | 5.729 |
| | Task_Var | .132 | 7.587 |
| | Task_Sig | .118 | 8.491 |
| | Task_Identity | .172 | 5.812 |
| | Feedbck_Job | .154 | 6.496 |
| | Work_Sch_Aut | .259 | 3.862 |

a. Dependent Variable: Des_Mal_Aut

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Task_Var | .130 | 7.673 |
| | Task_Sig | .125 | 7.992 |
| | Task_Identity | .173 | 5.793 |
| | Feedbck_Job | .154 | 6.513 |
| | Work_Sch_Aut | .256 | 3.913 |
| | Des_Mal_Aut | .176 | 5.693 |

a. Dependent Variable: Work_Method_Aut

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Task_Sig | .118 | 8.505 |
| | Task_Identity | .171 | 5.863 |
| | Feedbck_Job | .178 | 5.615 |
| | Work_Sch_Aut | .257 | 3.894 |
| | Des_Mal_Aut | .177 | 5.637 |
| | Work_Method_Aut | .174 | 5.737 |

a. Dependent Variable: Task_Var

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Task_Identity | .187 | 5.348 |
| | Feedbck_Job | .161 | 6.198 |
| | Work_Sch_Aut | .259 | 3.863 |
| | Des_Mal_Aut | .169 | 5.905 |
| | Work_Method_Aut | .179 | 5.593 |
| | Task_Var | .126 | 7.960 |

a. Dependent Variable: Task_Sig

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Feedbck_Job | .158 | 6.327 |
| | Work_Sch_Aut | .262 | 3.819 |
| | Des_Mal_Aut | .168 | 5.958 |
| | Work_Method_Aut | .167 | 5.975 |
| | Task_Var | .124 | 8.088 |
| | Task_Sig | .127 | 7.883 |

a. Dependent Variable: Task_Identity

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Work_Sch_Aut | .260 | 3.850 |
| | Des_Mal_Aut | .167 | 6.001 |
| | Work_Method_Aut | .165 | 6.055 |
| | Task_Var | .143 | 6.983 |
| | Task_Sig | .121 | 8.235 |
| | Task_Identity | .175 | 5.703 |

a. Dependent Variable: Feedbck_Job

## B. KNOWLEDGE CHARACTERISTICS

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Info_Proc | .101 | 9.876 |
| | Prob_Sol | .144 | 6.933 |
| | Skill_Variety | .138 | 7.235 |
| | Specialization | .103 | 9.681 |

a. Dependent Variable: Job_Complexity

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Prob_Sol | .155 | 6.452 |
| | Skill_Variety | .155 | 6.452 |
| | Specialization | .125 | 7.987 |
| | Job_Complexity | .681 | 1.469 |

a. Dependent Variable: Info_Proc

**Coefficients[a]**

| Model | | Collinearity Statistics Tolerance | VIF |
|---|---|---|---|
| 1 | Skill_Variety | .149 | 6.730 |
| | Specialization | .104 | 9.606 |
| | Job_Complexity | .675 | 1.480 |
| | Info_Proc | .108 | 9.260 |

a. Dependent Variable: Prob_Sol

**Coefficients[a]**

| Model | | Collinearity Statistics Tolerance | VIF |
|---|---|---|---|
| 1 | Specialization | .103 | 9.747 |
| | Job_Complexity | .674 | 1.484 |
| | Info_Proc | .112 | 8.896 |
| | Prob_Sol | .155 | 6.465 |

a. Dependent Variable: Skill_Variety

**Coefficients[a]**

| Model | | Collinearity Statistics Tolerance | VIF |
|---|---|---|---|
| 1 | Job_Complexity | .727 | 1.375 |
| | Info_Proc | .131 | 7.623 |
| | Prob_Sol | .157 | 6.388 |
| | Skill_Variety | .148 | 6.747 |

a. Dependent Variable: Specialization

## C. SOCIAL CHARACTERISTICS

**Coefficients[a]**

| Model | | Collinearity Statistics Tolerance | VIF |
|---|---|---|---|
| 1 | Initial_Inter | .181 | 5.511 |
| | Rec_Inter | .227 | 4.408 |
| | Feedbck_from_Others | .174 | 5.749 |

a. Dependent Variable: Social_Support

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Rec_Inter | .187 | 5.348 |
| | Feedbck_from_Others | .215 | 4.642 |
| | Social_Support | .184 | 5.430 |

a. Dependent Variable: Initial_Inter

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Feedbck_from_Others | .181 | 5.516 |
| | Social_Support | .205 | 4.890 |
| | Initial_Inter | .166 | 6.021 |

a. Dependent Variable: Rec_Inter

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Social_Support | .171 | 5.865 |
| | Initial_Inter | .208 | 4.806 |
| | Rec_Inter | .197 | 5.073 |

a. Dependent Variable: Feedbck_from_Others

## D. CONTEXTUAL CHARACTERISTICS

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Work_Conditions | .281 | 3.557 |
| | Software_Tools_Used | .281 | 3.557 |

a. Dependent Variable: Physical_Demands

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Software_Tools_Used | .668 | 1.497 |
| | Physical_Demands | .668 | 1.497 |

a. Dependent Variable: Work_Conditions

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | Physical_Demands | .690 | 1.449 |
| | Work_Conditions | .690 | 1.449 |

a. Dependent Variable: Software_Tools_Used

## III. PEOU AND PU

**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | PU | 1.000 | 1.000 |

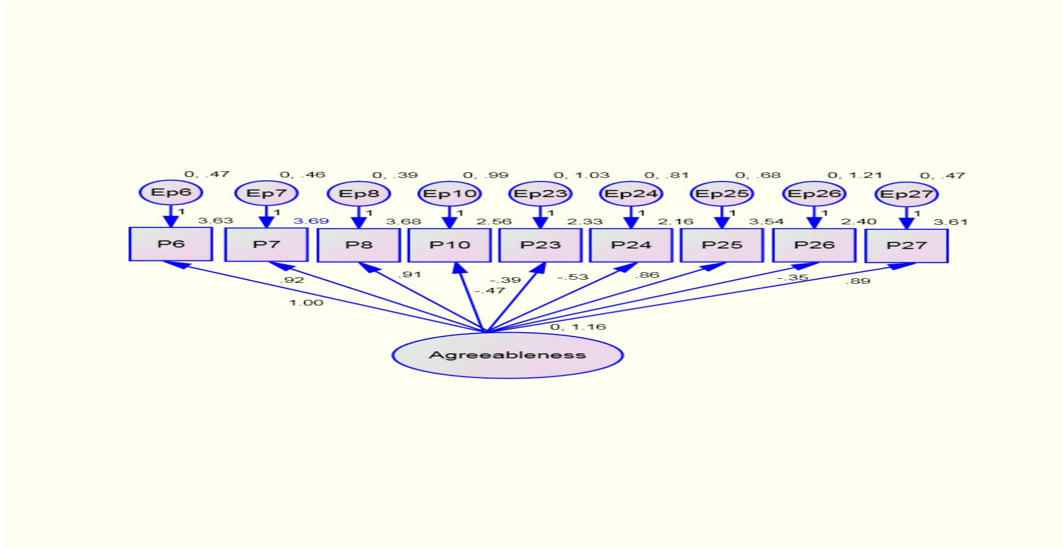
a. Dependent Variable: PEOU

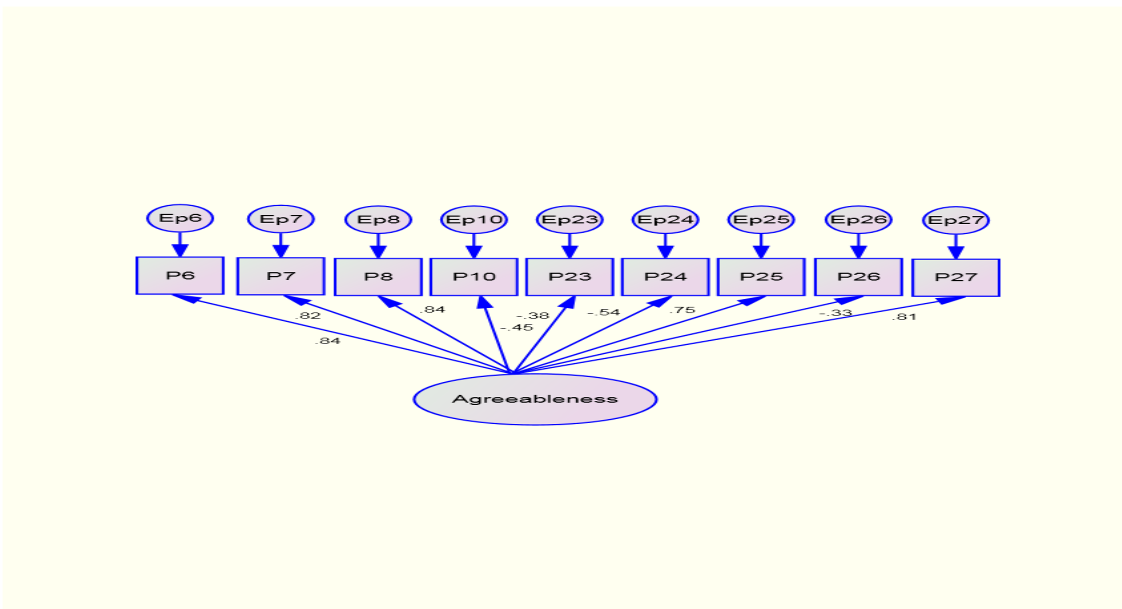
**Coefficients[a]**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | PEOU | 1.000 | 1.000 |

a. Dependent Variable: PU

## APPENDIX D – Factor Analysis

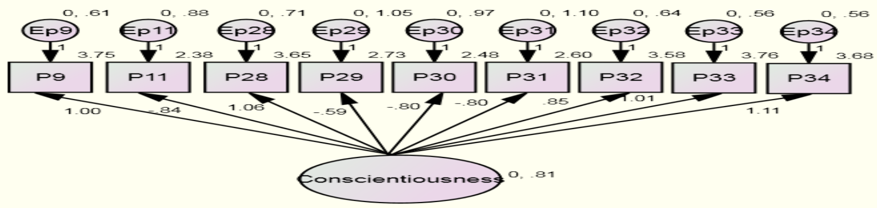


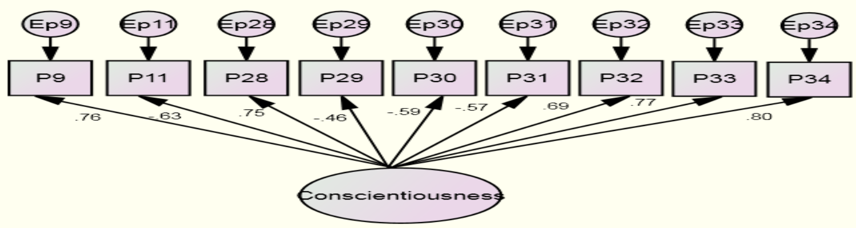




Result (Default model)

Minimum was achieved

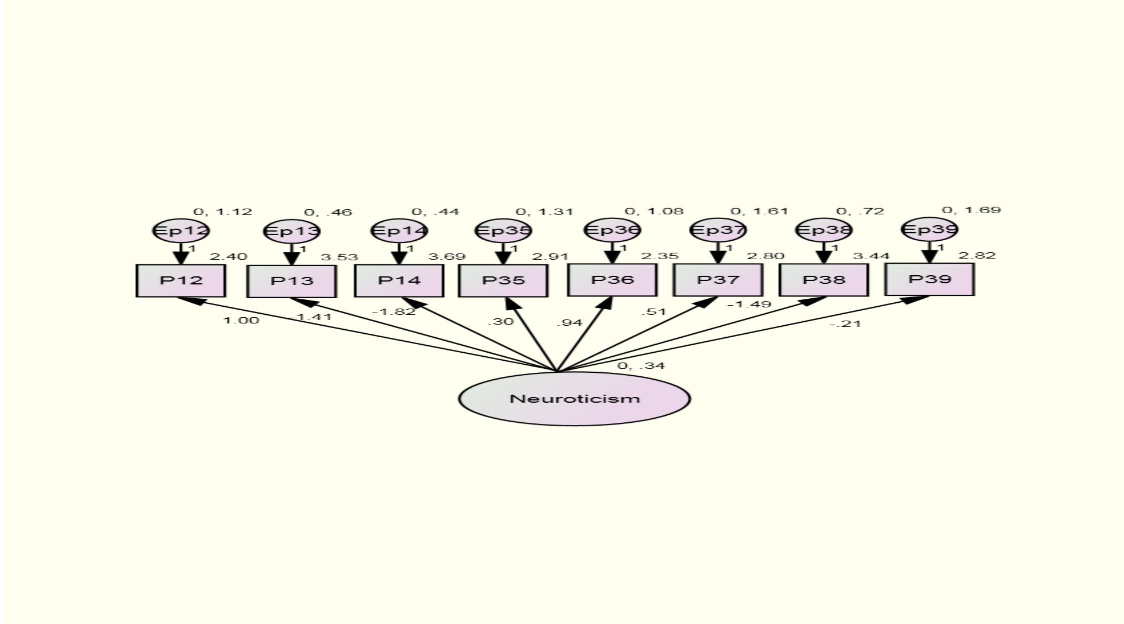
Chi-square = 411.448
Degrees of freedom = 27
Probability level = .000

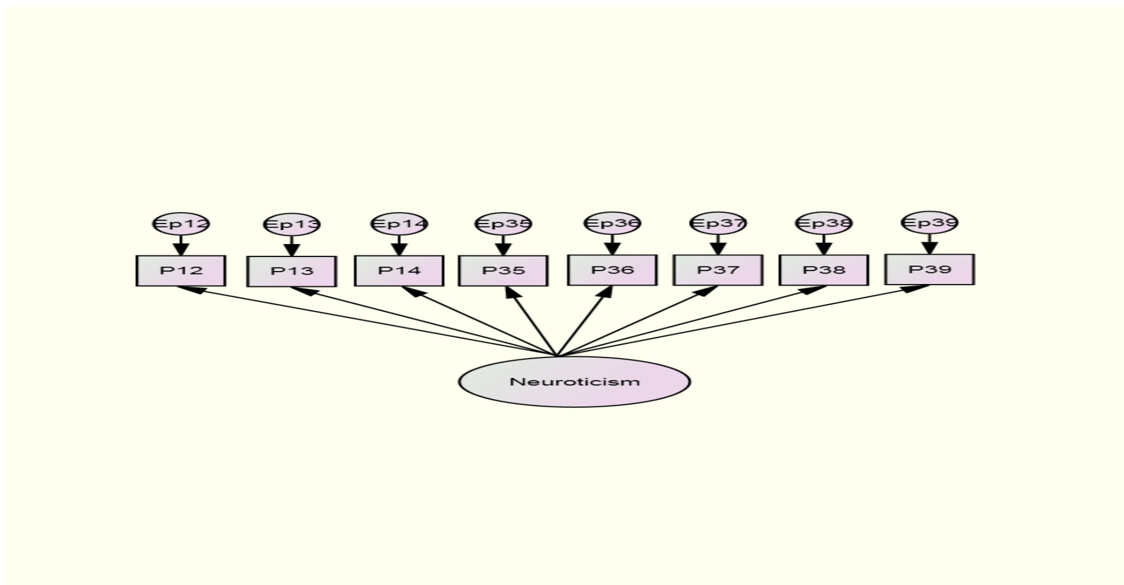



Result (Default model)

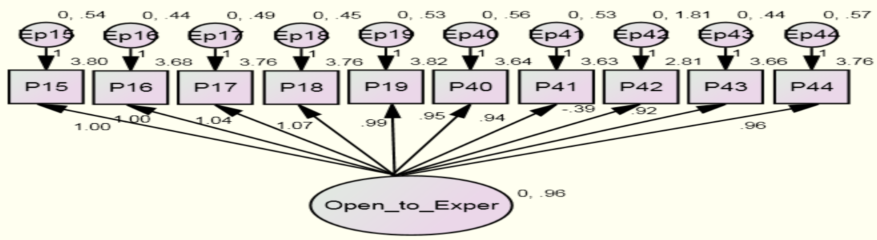
Minimum was achieved
Chi-square = 409.050
Degrees of freedom = 27
Probability level = .000

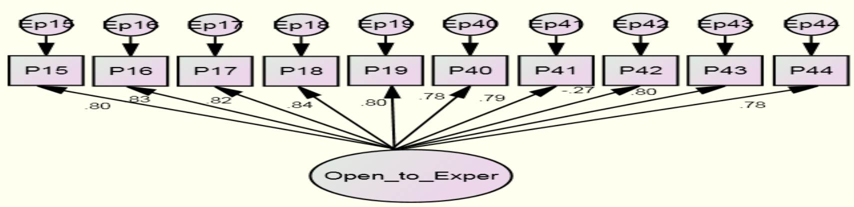


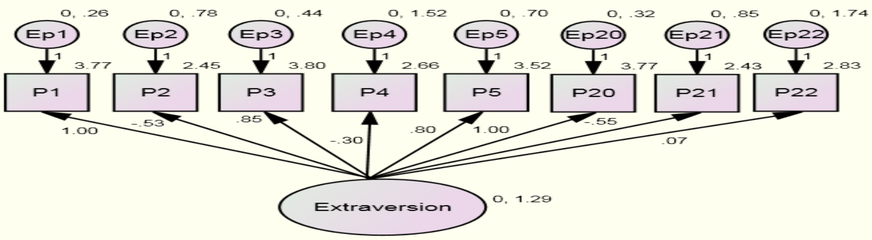

Result (Default model)

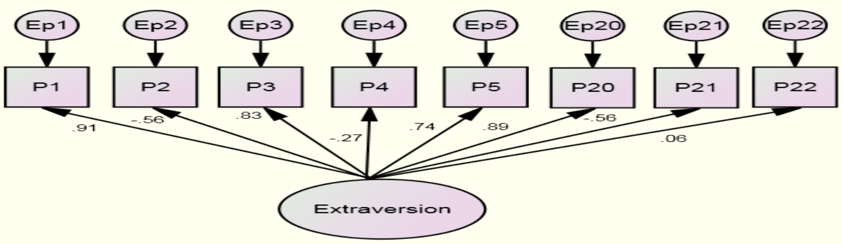
Minimum was achieved
Chi-square = 385.848
Degrees of freedom = 20
Probability level = .000




Result (Default model)
Minimum was achieved
Chi-square = 87.263
Degrees of freedom = 35
Probability level = .000



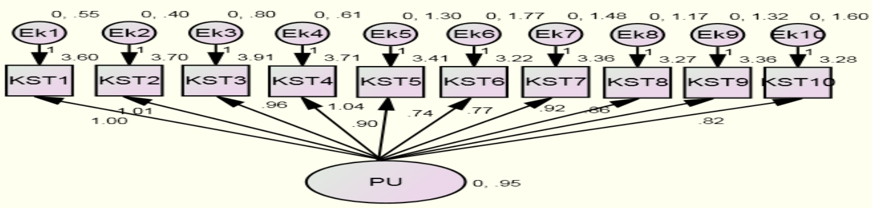

Result (Default model)

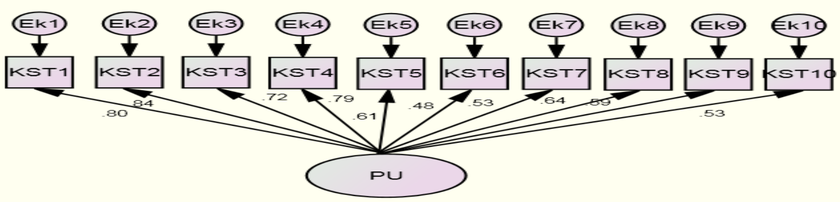
Minimum was achieved

Chi-square = 443.556

Degrees of freedom = 20

Probability level = .000



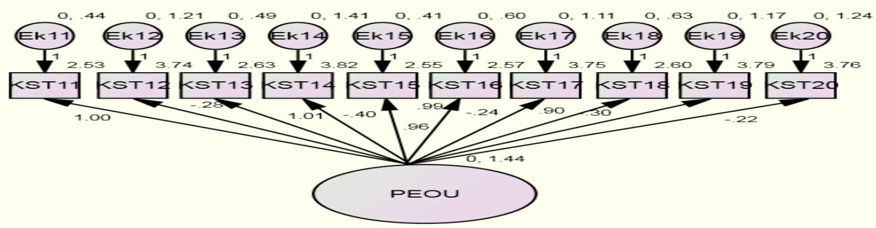

Result (Default model)

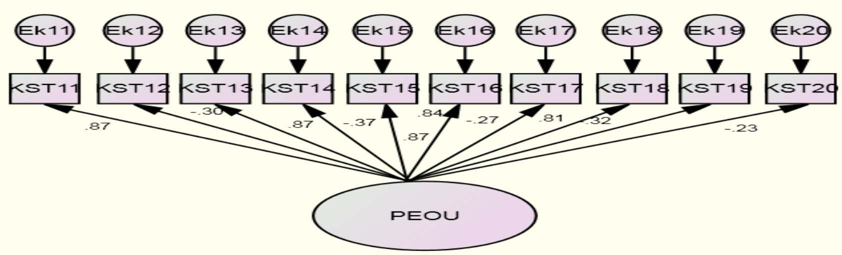
Minimum was achieved

Chi-square = 63.260

Degrees of freedom = 35

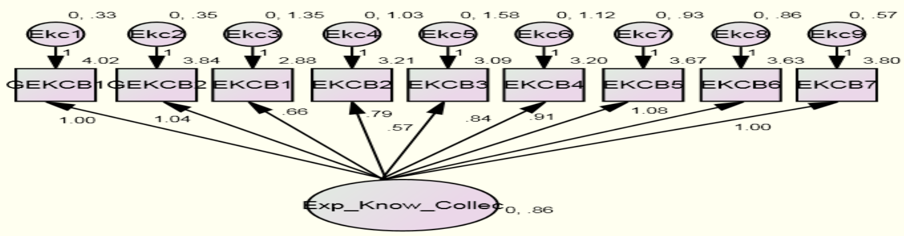
Probability level = .002

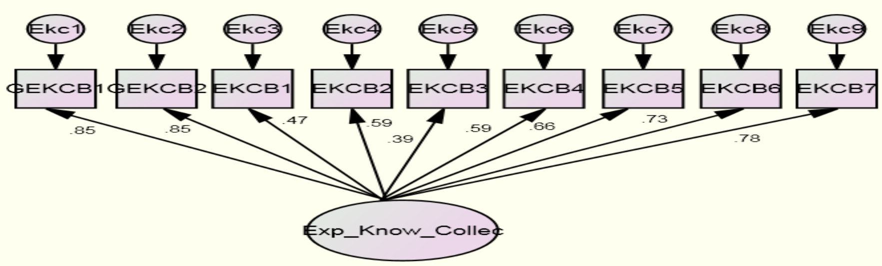


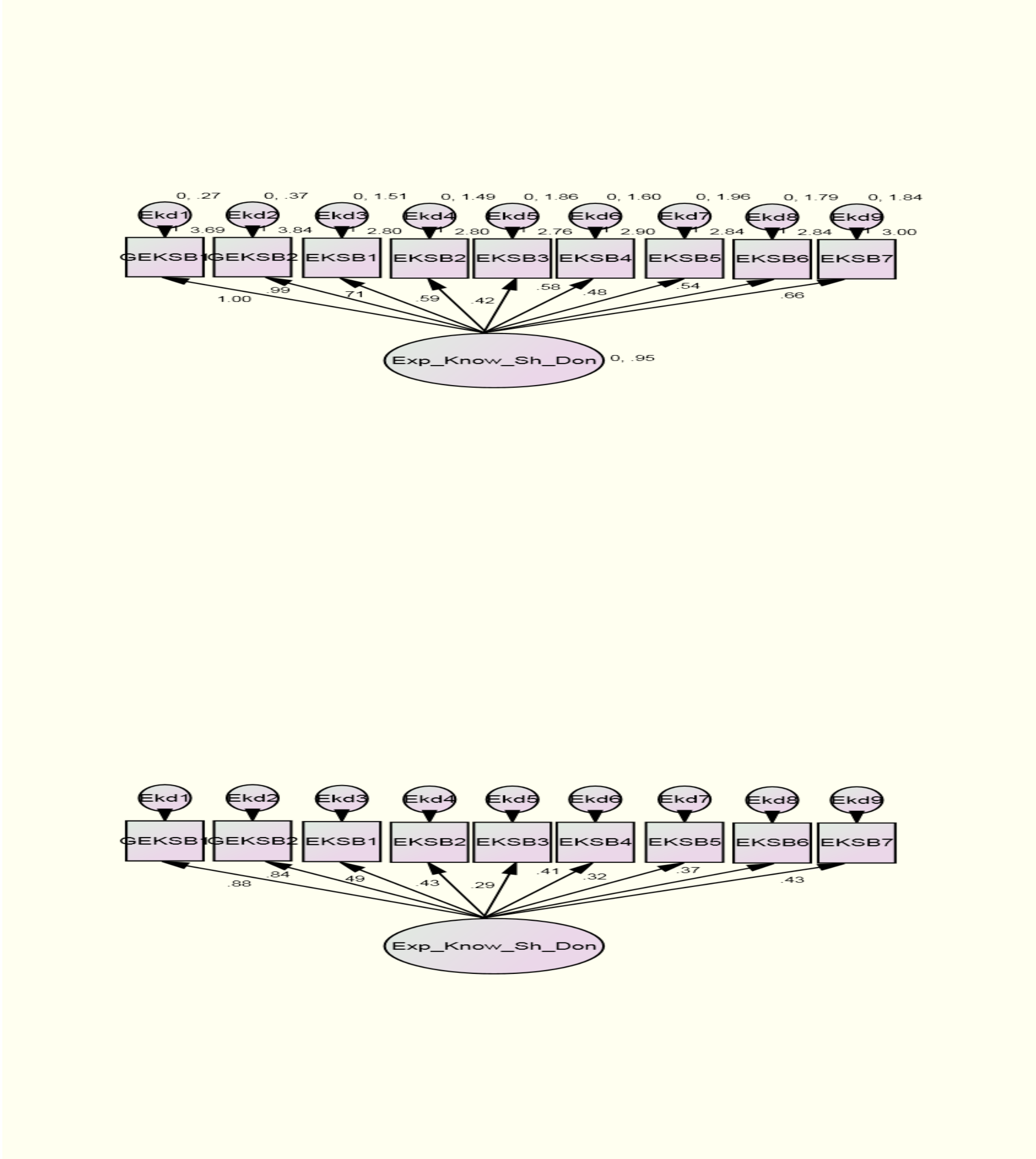

Result (Default model)

Minimum was achieved
Chi-square = 1181.041
Degrees of freedom = 35
Probability level = .000




Result (Default model)
Minimum was achieved
Chi-square = 70.911
Degrees of freedom = 27
Probability level = .000



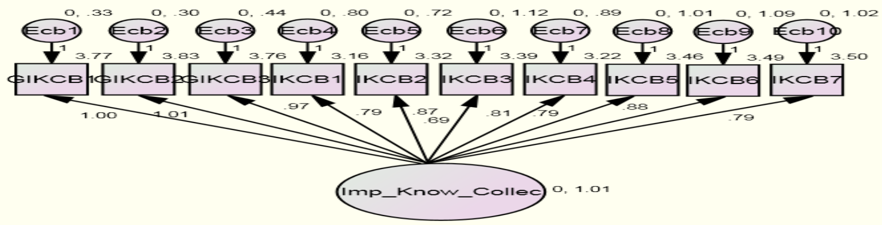

Result (Default model)

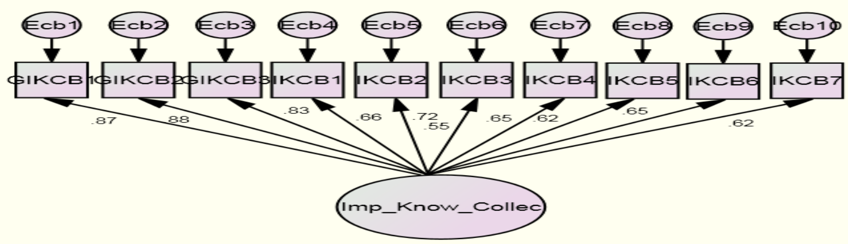
Minimum was achieved

Chi-square = 48.530

Degrees of freedom = 27

Probability level = .007



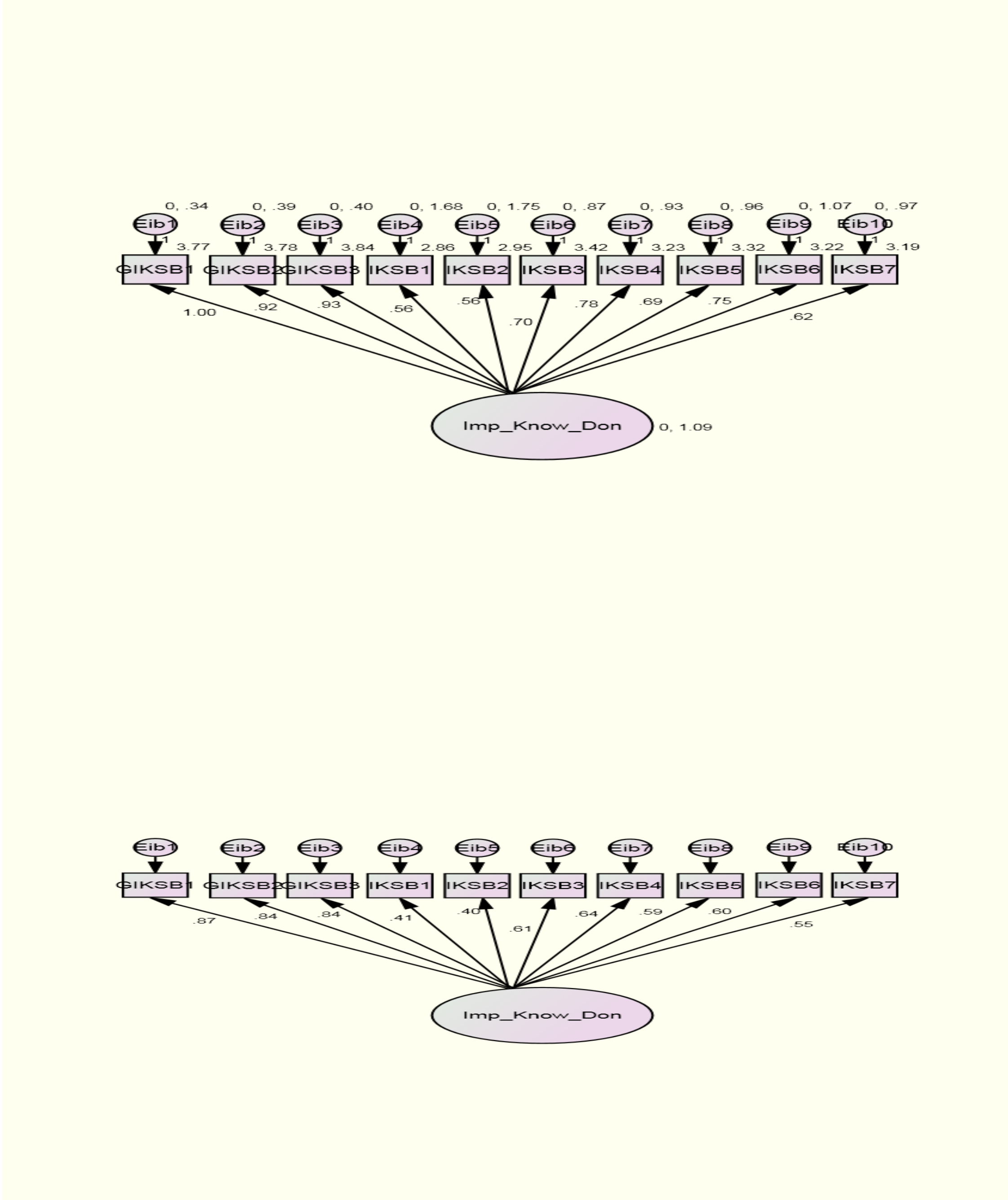

Result (Default model)

Minimum was achieved

Chi-square = 79.437

Degrees of freedom = 35

Probability level = .000



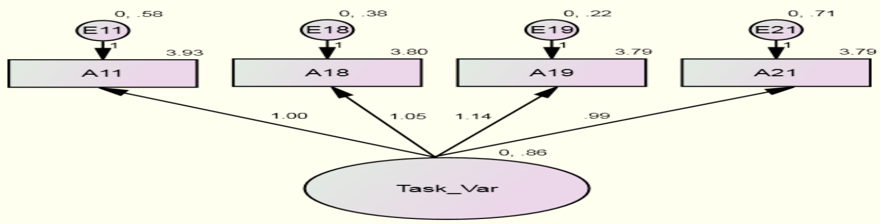

Result (Default model)

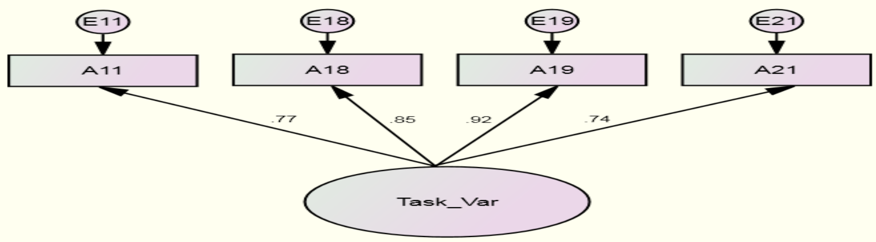
Minimum was achieved

Chi-square = 47.828

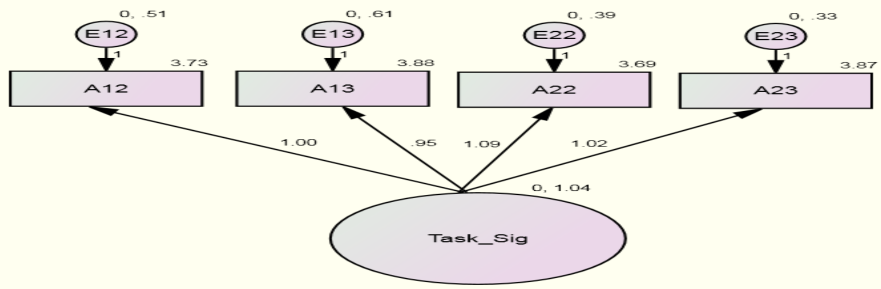
Degrees of freedom = 35

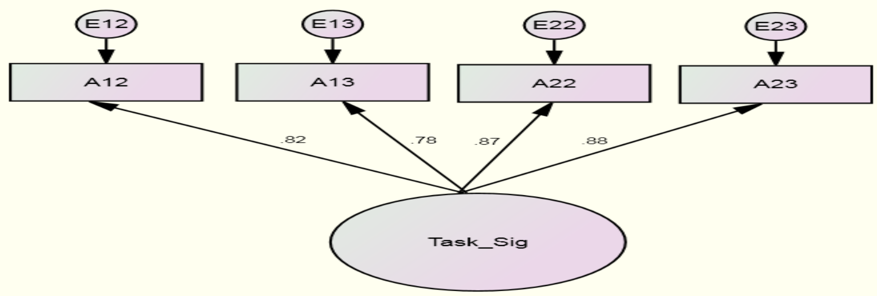
Probability level = .073




Result (Default model)
Minimum was achieved
Chi-square = 14.922
Degrees of freedom = 2
Probability level = .001



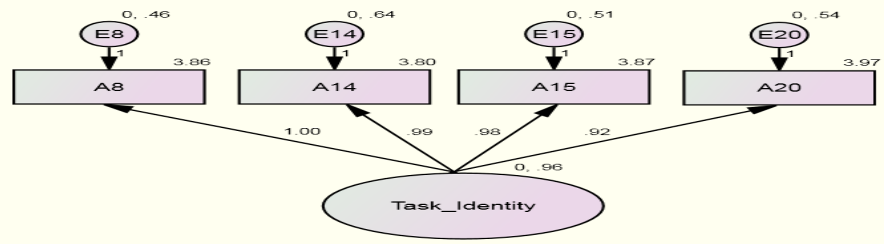

Result (Default model)

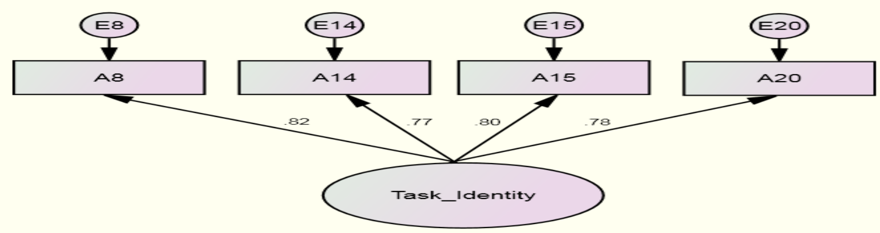
Minimum was achieved

Chi-square = 8.198

Degrees of freedom = 2

Probability level = .017



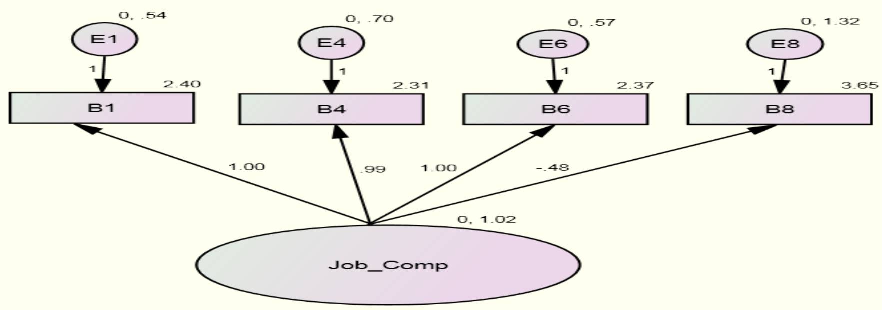

Result (Default model)

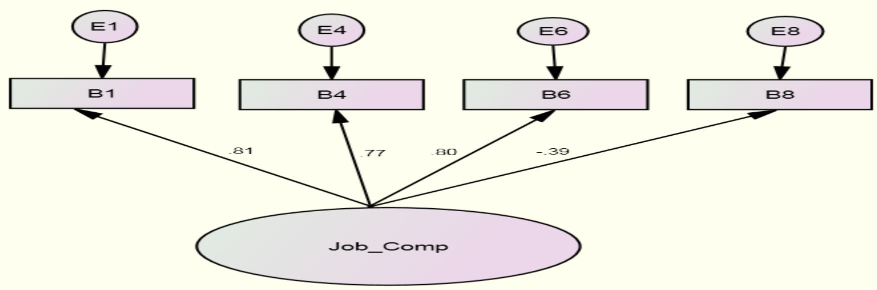
Minimum was achieved

Chi-square = 7.374

Degrees of freedom = 2

Probability level = .025



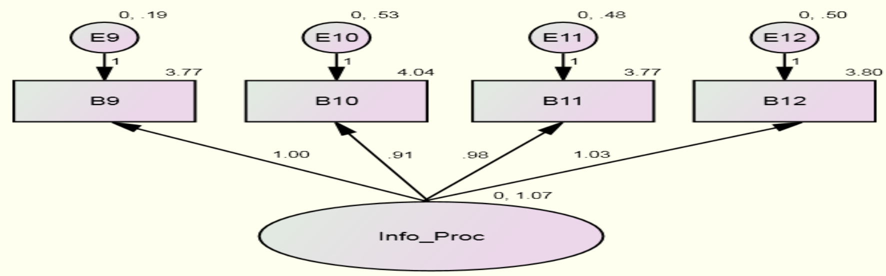

Result (Default model)

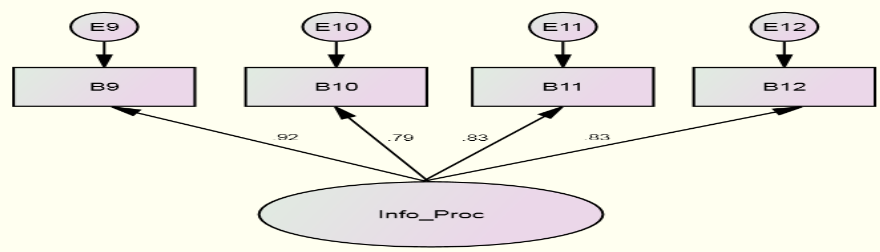
Minimum was achieved

Chi-square = 2.712

Degrees of freedom = 2

Probability level = .258



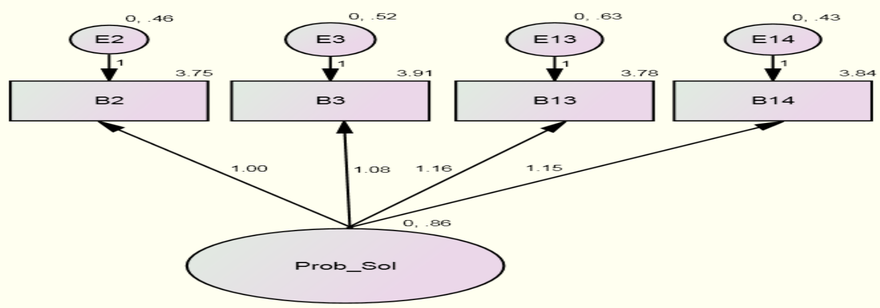

Result (Default model)

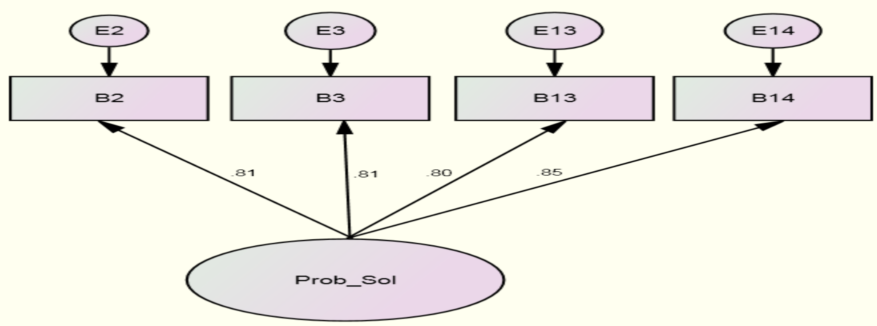
Minimum was achieved

Chi-square = 20.831

Degrees of freedom = 2

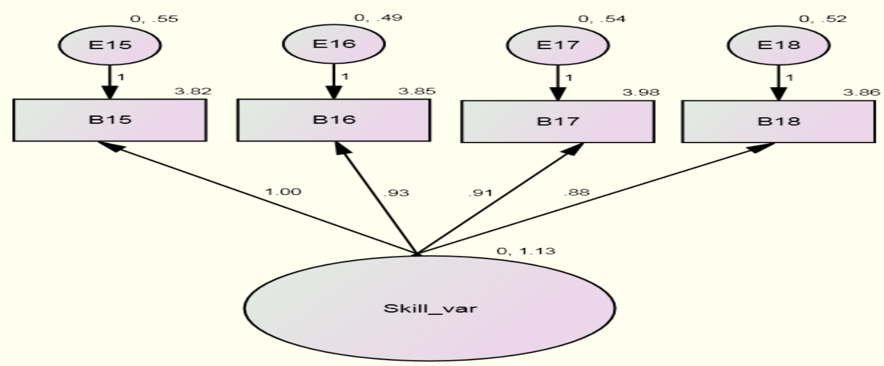
Probability level = .000

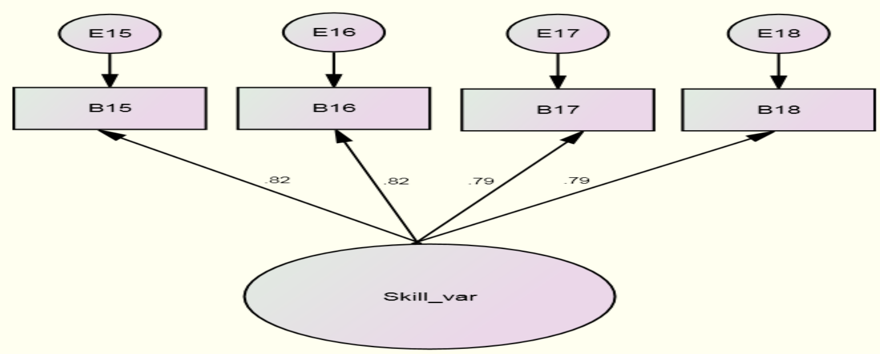



Result (Default model)

Minimum was achieved
Chi-square = 3.479
Degrees of freedom = 2
Probability level = .176



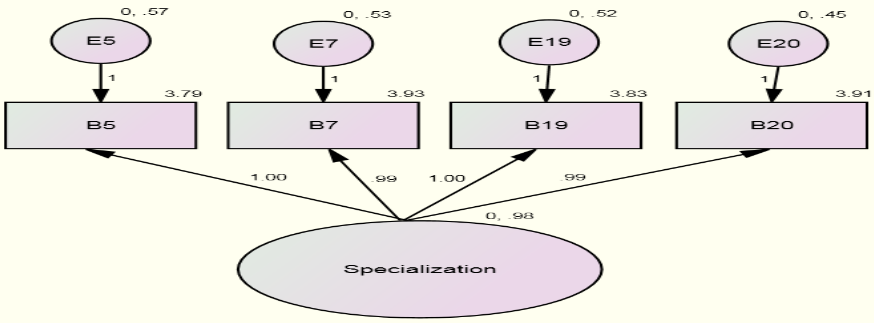

Result (Default model)

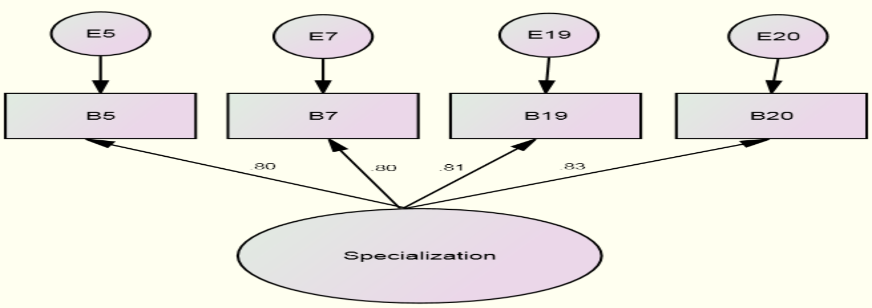
Minimum was achieved

Chi-square = 20.267

Degrees of freedom = 2

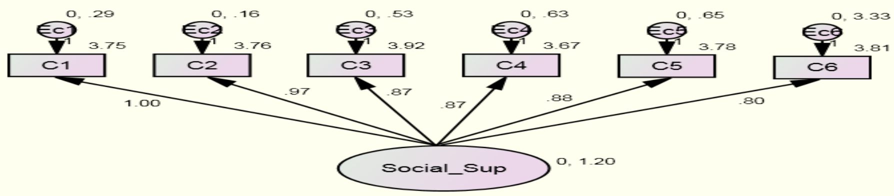
Probability level = .000

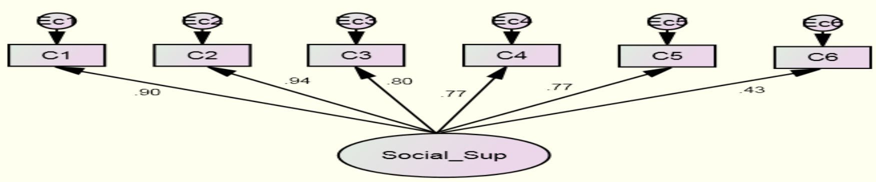


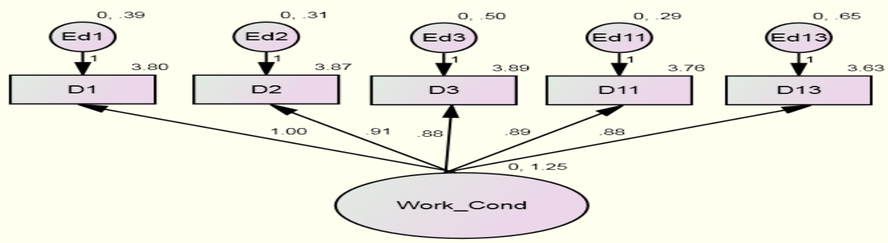

Result (Default model)

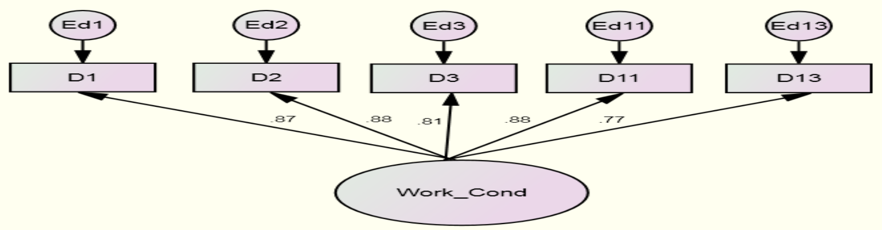
Minimum was achieved
Chi-square = 1.454
Degrees of freedom = 2
Probability level = .483




Result (Default model)
Minimum was achieved
Chi-square = 153.364
Degrees of freedom = 9
Probability level = .000




Result (Default model)

Minimum was achieved

Chi-square = 19.337

Degrees of freedom = 5

Probability level = .002

## APPENDIX E - Personality Traits and KSB

Table 4-1a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.28 | 0.15 | | 1.81 | 0.07 |
| | Extraversion | 0.25 | 0.05 | 0.28 | 5.63 | 0.00 |
| | Agreeableness | 0.30 | 0.05 | 0.30 | 5.52 | 0.00 |
| | Conscientiousness | 0.15 | 0.06 | 0.15 | 2.50 | 0.01 |
| | Neuroticism | -0.02 | 0.03 | -0.02 | -0.63 | 0.53 |
| | Open_Exper | 0.25 | 0.08 | 0.21 | 3.09 | 0.00 |
| | peou | 0.01 | 0.02 | 0.01 | 0.45 | 0.56 |

Table 4-1b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.27 | 0.15 | | 1.78 | 0.08 |
| | Extraversion | 0.26 | 0.05 | 0.29 | 5.51 | 0.00 |
| | Agreeableness | 0.29 | 0.06 | 0.29 | 5.25 | 0.00 |
| | Conscientiousness | 0.15 | 0.06 | 0.14 | 2.30 | 0.02 |
| | Neuroticism | -0.01 | 0.03 | -0.01 | -0.48 | 0.63 |
| | Open_Exper | 0.27 | 0.09 | 0.23 | 3.13 | 0.00 |
| | peou | 0.03 | 0.01 | 0.03 | 0.52 | 0.59 |
| | inter_peou_extra | 0.00 | 0.01 | -0.02 | -0.60 | 0.55 |

Table 4-1c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.25 | 0.15 | | 1.66 | 0.10 |
| | Extraversion | 0.04 | 0.12 | 0.04 | 0.33 | 0.74 |
| | Agreeableness | 0.50 | 0.11 | 0.51 | 4.40 | 0.00 |
| | Conscientiousness | 0.15 | 0.06 | 0.15 | 2.39 | 0.02 |
| | Neuroticism | -0.01 | 0.03 | -0.01 | -0.22 | 0.83 |
| | Open_Exper | 0.28 | 0.09 | 0.24 | 3.34 | 0.00 |
| | peou | 0.05 | 0.04 | 0.04 | 0.60 | 0.45 |
| | inter_peou_extra | 0.07 | 0.04 | 0.36 | 1.98 | 0.05 |
| | inter_peou_agree | -0.08 | 0.04 | -0.35 | -2.11 | 0.04 |

Table 4-1d: Impact of Individual Predictors on Dependent Variable

| **Coefficients**[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.25 | 0.15 | | 1.62 | 0.11 |
| | Extraversion | 0.07 | 0.12 | 0.07 | 0.53 | 0.60 |
| | Agreeableness | 0.56 | 0.15 | 0.57 | 3.73 | 0.00 |
| | Conscientiousness | 0.06 | 0.16 | 0.06 | 0.37 | 0.71 |
| | Neuroticism | -0.01 | 0.03 | -0.01 | -0.20 | 0.85 |
| | Open_Exper | 0.29 | 0.09 | 0.25 | 3.38 | 0.00 |
| | peou | 0.06 | 0.04 | 0.05 | 0.53 | 0.55 |
| | inter_peou_extra | 0.06 | 0.04 | 0.31 | 1.55 | 0.12 |
| | inter_peou_agree | -0.10 | 0.05 | -0.45 | -1.95 | 0.05 |
| | inter_peou_consc | 0.03 | 0.05 | 0.15 | 0.62 | 0.53 |

Table 4-1e: Impact of Individual Predictors on Dependent Variable

| **Coefficients**[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.27 | 0.16 | | 1.75 | 0.08 |
| | Extraversion | 0.07 | 0.12 | 0.08 | 0.57 | 0.57 |
| | Agreeableness | 0.53 | 0.15 | 0.54 | 3.46 | 0.00 |
| | Conscientiousness | 0.06 | 0.16 | 0.06 | 0.36 | 0.72 |
| | Neuroticism | 0.03 | 0.05 | 0.03 | 0.59 | 0.55 |
| | Open_Exper | 0.29 | 0.09 | 0.24 | 3.35 | 0.00 |
| | peou | 0.07 | 0.12 | 0.07 | 0.56 | 0.56 |
| | inter_peou_extra | 0.06 | 0.04 | 0.30 | 1.50 | 0.14 |
| | inter_peou_agree | -0.09 | 0.05 | -0.40 | -1.67 | 0.10 |
| | inter_peou_consc | 0.03 | 0.05 | 0.14 | 0.60 | 0.55 |
| | inter_peou_neuro | -0.01 | 0.02 | -0.07 | -0.85 | 0.40 |

Table 4-1f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.27 | 0.16 | | 1.75 | 0.08 |
| | Extraversion | 0.07 | 0.14 | 0.08 | 0.52 | 0.60 |
| | Agreeableness | 0.53 | 0.17 | 0.54 | 3.18 | 0.00 |
| | Conscientiousness | 0.06 | 0.17 | 0.06 | 0.35 | 0.72 |
| | Neuroticism | 0.03 | 0.05 | 0.03 | 0.59 | 0.56 |
| | Open_Exper | 0.28 | 0.20 | 0.24 | 1.38 | 0.17 |
| | peou | 0.02 | 0.01 | 0.02 | 0.58 | 0.53 |
| | inter_peou_extra | 0.06 | 0.04 | 0.30 | 1.28 | 0.20 |
| | inter_peou_agree | -0.09 | 0.06 | -0.41 | -1.53 | 0.13 |
| | inter_peou_consc | 0.03 | 0.05 | 0.14 | 0.58 | 0.56 |
| | inter_peou_neuro | -0.01 | 0.02 | -0.07 | -0.83 | 0.41 |
| | inter_peou_open | 0.00 | 0.06 | 0.01 | 0.04 | 0.97 |

Table 4-2a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.28 | 0.15 | | 1.81 | 0.07 |
| | Extraversion | 0.25 | 0.05 | 0.28 | 5.63 | 0.00 |
| | Agreeableness | 0.30 | 0.05 | 0.30 | 5.52 | 0.00 |
| | Conscientiousness | 0.15 | 0.06 | 0.15 | 2.50 | 0.01 |
| | Neuroticism | -0.02 | 0.03 | -0.02 | -0.63 | 0.53 |
| | Open_Exper | 0.25 | 0.08 | 0.21 | 3.09 | 0.00 |
| | peou | 0.01 | 0.02 | 0.01 | 0.45 | 0.56 |

Table 4-2b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.27 | 0.15 | | 1.78 | 0.08 |
| | Extraversion | 0.26 | 0.05 | 0.29 | 5.51 | 0.00 |
| | Agreeableness | 0.29 | 0.06 | 0.29 | 5.25 | 0.00 |
| | Conscientiousness | 0.15 | 0.06 | 0.14 | 2.30 | 0.02 |
| | Neuroticism | -0.01 | 0.03 | -0.01 | -0.48 | 0.63 |
| | Open_Exper | 0.27 | 0.09 | 0.23 | 3.13 | 0.00 |
| | peou | 0.03 | 0.01 | 0.03 | 0.52 | 0.59 |
| | inter_peou_extra | 0.00 | 0.01 | -0.02 | -0.60 | 0.55 |

Table 4-2c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.345 | 0.155 | | 2.225 | 0.027 |
| | Extraversion | 0.093 | 0.118 | 0.103 | 0.795 | 0.427 |
| | Agreeableness | 0.405 | 0.115 | 0.411 | 3.530 | 0.000 |
| | Conscientiousness | 0.174 | 0.064 | 0.168 | 2.716 | 0.007 |
| | Neuroticism | -0.022 | 0.029 | -0.022 | -0.779 | 0.437 |
| | Open_Exper | 0.295 | 0.086 | 0.250 | 3.418 | 0.001 |
| | peou | 0.020 | 0.027 | 0.020 | 0.684 | 0.353 |
| | inter_peou_extra | 0.046 | 0.035 | 0.242 | 1.309 | 0.191 |
| | inter_peou_agree | -0.054 | 0.037 | -0.245 | -1.455 | 0.147 |

Table 4-2d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.335 | 0.155 | | 2.159 | 0.032 |
| | Extraversion | 0.134 | 0.126 | 0.149 | 1.070 | 0.285 |
| | Agreeableness | 0.496 | 0.151 | 0.504 | 3.278 | 0.001 |
| | Conscientiousness | 0.036 | 0.162 | 0.035 | 0.220 | 0.826 |
| | Neuroticism | -0.022 | 0.029 | -0.021 | -0.750 | 0.454 |
| | Open_Exper | 0.301 | 0.086 | 0.255 | 3.479 | 0.001 |
| | peou | 0.035 | 0.151 | 0.034 | 0.210 | 0.757 |
| | inter_peou_extra | 0.032 | 0.039 | 0.165 | 0.815 | 0.416 |
| | inter_peou_agree | -0.087 | 0.051 | -0.397 | -1.688 | 0.092 |
| | inter_peou_consc | 0.049 | 0.053 | 0.219 | 0.926 | 0.355 |

Table 4-2e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.346 | 0.159 | | 2.185 | 0.030 |
| | Extraversion | 0.137 | 0.126 | 0.151 | 1.086 | 0.278 |
| | Agreeableness | 0.484 | 0.155 | 0.492 | 3.114 | 0.002 |
| | Conscientiousness | 0.035 | 0.163 | 0.034 | 0.214 | 0.831 |
| | Neuroticism | -0.006 | 0.052 | -0.006 | -0.117 | 0.907 |
| | Open_Exper | 0.300 | 0.087 | 0.255 | 3.465 | 0.001 |
| | peou | 0.001 | 0.065 | 0.001 | 0.112 | 0.804 |
| | inter_peou_extra | 0.031 | 0.039 | 0.161 | 0.792 | 0.429 |
| | inter_peou_agree | -0.082 | 0.053 | -0.375 | -1.541 | 0.124 |
| | inter_peou_consc | 0.048 | 0.053 | 0.217 | 0.918 | 0.359 |
| | inter_peou_neuro | -0.006 | 0.016 | -0.028 | -0.361 | 0.719 |

Table 4-2f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.350 | 0.159 | | 2.201 | 0.028 |
| | Extraversion | 0.104 | 0.142 | 0.115 | 0.730 | 0.466 |
| | Agreeableness | 0.450 | 0.169 | 0.458 | 2.660 | 0.008 |
| | Conscientiousness | 0.014 | 0.168 | 0.013 | 0.083 | 0.934 |
| | Neuroticism | -0.012 | 0.053 | -0.012 | -0.227 | 0.820 |
| | Open_Exper | 0.393 | 0.206 | 0.334 | 1.911 | 0.057 |
| | peou | 0.010 | 0.050 | 0.009 | 0.220 | 0.815 |
| | inter_peou_extra | 0.042 | 0.045 | 0.221 | 0.936 | 0.350 |
| | inter_peou_agree | -0.069 | 0.059 | -0.318 | -1.181 | 0.238 |
| | inter_peou_consc | 0.055 | 0.054 | 0.246 | 1.009 | 0.314 |
| | inter_peou_neuro | -0.004 | 0.017 | -0.019 | -0.240 | 0.810 |
| | inter_peou_open | -0.032 | 0.064 | -0.153 | -0.500 | 0.617 |

Table 4-3a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.326 | 0.161 | | 2.025 | 0.044 |
| | Extraversion | 0.272 | 0.047 | 0.297 | 5.761 | 0.000 |
| | Agreeableness | 0.29 | 0.056 | 0.291 | 5.144 | 0.000 |
| | Conscientiousness | 0.162 | 0.065 | 0.155 | 2.492 | 0.013 |
| | Neuroticism | -0.029 | 0.029 | -0.028 | -1.013 | 0.312 |
| | Open_Exper | 0.224 | 0.086 | 0.188 | 2.606 | 0.010 |
| | peou | 0.026 | 0.023 | 0.025 | 1.010 | .0215 |

Table 4-3b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 2 | (Constant) | 0.316 | 0.161 | | 1.962 | 0.051 |
| | Extraversion | 0.298 | 0.05 | 0.326 | 5.982 | 0.000 |
| | Agreeableness | 0.269 | 0.058 | 0.27 | 4.68 | 0.000 |
| | Conscientiousness | 0.138 | 0.067 | 0.132 | 2.077 | 0.038 |
| | Neuroticism | -0.019 | 0.03 | -0.018 | -0.639 | 0.523 |
| | Open_Exper | 0.263 | 0.089 | 0.22 | 2.949 | 0.003 |
| | peou | 0.051 | 0.002 | 0.050 | 1.502 | 0.102 |
| | inter_peou_extra | -0.01 | 0.006 | -0.052 | -1.606 | 0.109 |

Table 4-3c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 3 | (Constant) | 0.3 | 0.161 | | 1.864 | 0.063 |
| | Extraversion | 0.101 | 0.122 | 0.11 | 0.828 | 0.408 |
| | Agreeableness | 0.454 | 0.119 | 0.455 | 3.818 | 0.000 |
| | Conscientiousness | 0.143 | 0.066 | 0.136 | 2.148 | 0.032 |
| | Neuroticism | -0.012 | 0.03 | -0.012 | -0.416 | 0.677 |
| | Open_Exper | 0.279 | 0.089 | 0.234 | 3.12 | 0.002 |
| | peou | 0.011 | 0.002 | 0.011 | 0.410 | 0.521 |
| | inter_peou_extra | 0.054 | 0.037 | 0.278 | 1.468 | 0.143 |
| | inter_peou_agree | -0.068 | 0.038 | -0.305 | -1.771 | 0.077 |

Table 4-3d: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 4 | (Constant) | 0.285 | 0.161 | | 1.771 | 0.077 |
| | Extraversion | 0.165 | 0.13 | 0.18 | 1.268 | 0.206 |
| | Agreeableness | 0.596 | 0.157 | 0.598 | 3.804 | 0.000 |
| | Conscientiousness | -0.072 | 0.168 | -0.069 | -0.431 | 0.667 |
| | Neuroticism | -0.011 | 0.03 | -0.011 | -0.374 | 0.708 |
| | Open_Exper | 0.289 | 0.09 | 0.242 | 3.222 | 0.001 |
| | peou | 0.011 | 0.03 | 0.011 | 0.374 | 0.708 |
| | inter_peou_extra | 0.031 | 0.04 | 0.16 | 0.771 | 0.441 |
| | inter_peou_agree | -0.119 | 0.053 | -0.539 | -2.241 | 0.026 |
| | inter_peou_consc | 0.076 | 0.054 | 0.336 | 1.392 | 0.165 |

Coefficients[a]

Table 4-3e: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 5 | (Constant) | 0.292 | 0.164 | | 1.777 | 0.076 |
| | Extraversion | 0.166 | 0.13 | 0.182 | 1.275 | 0.203 |
| | Agreeableness | 0.589 | 0.161 | 0.591 | 3.658 | 0.000 |
| | Conscientiousness | -0.073 | 0.168 | -0.07 | -0.433 | 0.665 |
| | Neuroticism | -0.002 | 0.053 | -0.001 | -0.029 | 0.977 |
| | Open_Exper | 0.288 | 0.09 | 0.241 | 3.212 | 0.001 |
| | peou | 0.001 | 0.052 | 0.001 | 0.432 | 0.976 |
| | inter_peou_extra | 0.03 | 0.04 | 0.158 | 0.757 | 0.449 |
| | inter_peou_agree | -0.116 | 0.055 | -0.525 | -2.112 | 0.035 |
| | inter_peou_consc | 0.075 | 0.054 | 0.335 | 1.385 | 0.167 |
| | inter_peou_neuro | -0.004 | 0.017 | -0.017 | -0.215 | 0.830 |

Coefficients[a]

Table 4-3f: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 6 | (Constant) | 0.289 | 0.165 | | 1.759 | 0.079 |
| | Extraversion | 0.19 | 0.147 | 0.208 | 1.289 | 0.198 |
| | Agreeableness | 0.613 | 0.175 | 0.615 | 3.493 | 0.001 |
| | Conscientiousness | -0.058 | 0.174 | -0.055 | -0.333 | 0.739 |
| | Neuroticism | 0.003 | 0.055 | 0.003 | 0.05 | 0.960 |
| | Open_Exper | 0.221 | 0.213 | 0.185 | 1.037 | 0.300 |
| | peou | 0.048 | 0.152 | 0.046 | 0.027 | 0.653 |
| | inter_peou_extra | 0.022 | 0.047 | 0.115 | 0.479 | 0.633 |
| | inter_peou_agree | -0.125 | 0.061 | -0.566 | -2.056 | 0.040 |
| | inter_peou_consc | 0.071 | 0.056 | 0.315 | 1.262 | 0.208 |
| | inter_peou_neuro | -0.005 | 0.017 | -0.023 | -0.286 | 0.775 |
| | inter_peou_open | 0.023 | 0.066 | 0.109 | 0.346 | 0.729 |

Table 4-4a: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 0.367 | 0.153 | | 2.389 | 0.017 |
| | Extraversion | 0.293 | 0.045 | 0.324 | 6.527 | 0.000 |
| | Agreeableness | 0.291 | 0.054 | 0.295 | 5.421 | 0.000 |
| | Conscientiousness | 0.198 | 0.062 | 0.192 | 3.204 | 0.001 |
| | Neuroticism | -0.031 | 0.028 | -0.03 | -1.136 | 0.257 |
| | Open_Exper | 0.155 | 0.082 | 0.131 | 1.888 | 0.06 |
| | peou | 0.025 | 0.075 | 0.023 | 1.125 | 0.242 |

Table 4-4b: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 2 | (Constant) | 0.358 | 0.153 | | 2.333 | 0.02 |
| | Extraversion | 0.315 | 0.047 | 0.348 | 6.632 | 0.000 |
| | Agreeableness | 0.274 | 0.055 | 0.278 | 4.993 | 0.000 |
| | Conscientiousness | 0.179 | 0.063 | 0.173 | 2.818 | 0.005 |
| | Neuroticism | -0.023 | 0.028 | -0.022 | -0.806 | 0.421 |
| | Open_Exper | 0.187 | 0.085 | 0.158 | 2.196 | 0.029 |
| | peou | 0.020 | 0.026 | 0.020 | 0.701 | 0.418 |
| | inter_peou_extra | -0.008 | 0.006 | -0.044 | -1.392 | 0.165 |

Table 4-4c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.344 | 0.153 | | 2.243 | 0.026 |
| | Extraversion | 0.145 | 0.116 | 0.16 | 1.245 | 0.214 |
| | Agreeableness | 0.433 | 0.113 | 0.44 | 3.82 | 0.000 |
| | Conscientiousness | 0.182 | 0.063 | 0.176 | 2.881 | 0.004 |
| | Neuroticism | -0.017 | 0.028 | -0.017 | -0.602 | 0.547 |
| | Open_Exper | 0.2 | 0.085 | 0.17 | 2.351 | 0.019 |
| | peou | 0.015 | 0.020 | 0.014 | 0.582 | 0.526 |
| | inter_peou_extra | 0.047 | 0.035 | 0.245 | 1.339 | 0.181 |
| | inter_peou_agree | -0.058 | 0.036 | -0.267 | -1.603 | 0.11 |

Table 4-4d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.345 | 0.154 | | 2.246 | 0.025 |
| | Extraversion | 0.137 | 0.124 | 0.152 | 1.103 | 0.271 |
| | Agreeableness | 0.416 | 0.15 | 0.423 | 2.778 | 0.006 |
| | Conscientiousness | 0.208 | 0.161 | 0.201 | 1.292 | 0.197 |
| | Neuroticism | -0.017 | 0.028 | -0.017 | -0.606 | 0.545 |
| | Open_Exper | 0.199 | 0.086 | 0.169 | 2.328 | 0.020 |
| | peou | 0.014 | 0.025 | 0.012 | 0.502 | 0.520 |
| | inter_peou_extra | 0.049 | 0.038 | 0.259 | 1.29 | 0.198 |
| | inter_peou_agree | -0.052 | 0.051 | -0.239 | -1.027 | 0.305 |
| | inter_peou_consc | -0.009 | 0.052 | -0.04 | -0.171 | 0.864 |

Table 4-4e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.344 | 0.157 | | 2.192 | 0.029 |
| | Extraversion | 0.137 | 0.125 | 0.152 | 1.098 | 0.273 |
| | Agreeableness | 0.418 | 0.154 | 0.424 | 2.715 | 0.007 |
| | Conscientiousness | 0.208 | 0.161 | 0.201 | 1.291 | 0.198 |
| | Neuroticism | -0.019 | 0.051 | -0.018 | -0.372 | 0.710 |
| | Open_Exper | 0.199 | 0.086 | 0.169 | 2.325 | 0.021 |
| | peou | 0.010 | 0.025 | 0.010 | 0.320 | 0.652 |
| | inter_peou_extra | 0.05 | 0.038 | 0.26 | 1.289 | 0.198 |
| | inter_peou_agree | -0.053 | 0.053 | -0.242 | -1.003 | 0.316 |
| | inter_peou_consc | -0.009 | 0.052 | -0.04 | -0.17 | 0.865 |
| | inter_peou_neuro | 0.001 | 0.016 | 0.003 | 0.043 | 0.966 |

Table 4-4f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.347 | 0.157 | | 2.207 | 0.028 |
| | Extraversion | 0.107 | 0.141 | 0.118 | 0.758 | 0.449 |
| | Agreeableness | 0.387 | 0.168 | 0.393 | 2.308 | 0.022 |
| | Conscientiousness | 0.189 | 0.166 | 0.182 | 1.134 | 0.258 |
| | Neuroticism | -0.025 | 0.053 | -0.024 | -0.467 | 0.641 |
| | Open_Exper | 0.285 | 0.204 | 0.242 | 1.398 | 0.163 |
| | peou | 0.020 | 0.052 | 0.019 | 0.359 | 0.540 |
| | inter_peou_extra | 0.06 | 0.045 | 0.314 | 1.345 | 0.179 |
| | inter_peou_agree | -0.041 | 0.058 | -0.189 | -0.71 | 0.478 |
| | inter_peou_consc | -0.003 | 0.054 | -0.013 | -0.056 | 0.956 |
| | inter_peou_neuro | 0.002 | 0.016 | 0.011 | 0.144 | 0.886 |
| | inter_peou_open | -0.029 | 0.064 | -0.14 | -0.462 | 0.644 |

Table 4-5a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.276 | 0.153 | | 1.806 | 0.072 |
| | Extraversion | 0.252 | 0.045 | 0.28 | 5.63 | 0.000 |
| | Agreeableness | 0.295 | 0.053 | 0.3 | 5.518 | 0.000 |
| | Conscientiousness | 0.154 | 0.062 | 0.149 | 2.498 | 0.013 |
| | Neuroticism | -0.017 | 0.027 | -0.017 | -0.626 | 0.532 |
| | pu | 0.012 | 0.014 | 0.012 | 0.584 | 0.459 |
| | Open_Exper | 0.252 | 0.082 | 0.214 | 3.086 | 0.002 |

Table 4-5b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.359 | 0.187 | | 7.26 | 0.000 |
| | Extraversion | -0.223 | 0.068 | -0.248 | -3.262 | 0.001 |
| | Agreeableness | 0.112 | 0.053 | 0.114 | 2.117 | 0.035 |
| | Conscientiousness | 0.1 | 0.056 | 0.097 | 1.771 | 0.077 |
| | Neuroticism | 0.006 | 0.025 | 0.006 | 0.227 | 0.821 |
| | Open_Exper | 0.106 | 0.076 | 0.09 | 1.385 | 0.167 |
| | pu | 0.049 | 0.032 | 0.049 | 0.877 | 0.065 |
| | inter_pu_extra | 0.134 | 0.015 | 0.858 | 8.654 | 0.000 |

Table 4-5c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.528 | 0.202 | | 7.564 | 0.000 |
| | Extraversion | 0.008 | 0.127 | 0.009 | 0.066 | 0.948 |
| | Agreeableness | -0.176 | 0.143 | -0.179 | -1.225 | 0.221 |
| | Conscientiousness | 0.066 | 0.058 | 0.064 | 1.137 | 0.257 |
| | Neuroticism | 0.005 | 0.025 | 0.005 | 0.197 | 0.844 |
| | Open_Exper | 0.095 | 0.076 | 0.081 | 1.25 | 0.212 |
| | pu | 0.07 | 0.027 | 0.06 | 0.198 | 0.742 |
| | inter_pu_extra | 0.063 | 0.036 | 0.408 | 1.765 | 0.078 |
| | inter_pu_agree | 0.084 | 0.039 | 0.54 | 2.159 | 0.031 |

Table 4-5d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.534 | 0.203 | | 7.542 | 0.000 |
| | Extraversion | 0.026 | 0.142 | 0.029 | 0.186 | 0.852 |
| | Agreeableness | -0.146 | 0.178 | -0.148 | -0.82 | 0.413 |
| | Conscientiousness | 0.012 | 0.198 | 0.012 | 0.062 | 0.950 |
| | Neuroticism | 0.005 | 0.025 | 0.005 | 0.191 | 0.849 |
| | pu | 0.004 | 0.020 | 0.004 | 0.182 | 0.864 |
| | Open_Exper | 0.097 | 0.076 | 0.082 | 1.265 | 0.207 |
| | inter_pu_extra | 0.058 | 0.04 | 0.375 | 1.457 | 0.146 |
| | inter_pu_agree | 0.075 | 0.051 | 0.481 | 1.486 | 0.138 |
| | inter_pu_consc | 0.015 | 0.052 | 0.093 | 0.286 | 0.775 |

Table 4-5e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 1.979 | 0.206 | | 9.628 | 0.000 |
| | Extraversion | -0.037 | 0.135 | -0.041 | -0.273 | 0.785 |
| | Agreeableness | 0.051 | 0.172 | 0.052 | 0.298 | 0.766 |
| | Conscientiousness | -0.023 | 0.188 | -0.023 | -0.124 | 0.901 |
| | Neuroticism | -0.323 | 0.057 | -0.313 | -5.656 | 0.000 |
| | Open_Exper | 0.093 | 0.072 | 0.079 | 1.288 | 0.199 |
| | pu | 0.082 | 0.065 | 0.056 | 1.129 | 0.146 |
| | inter_pu_extra | 0.067 | 0.038 | 0.43 | 1.758 | 0.080 |
| | inter_pu_agree | 0.014 | 0.049 | 0.091 | 0.291 | 0.771 |
| | inter_pu_consc | 0.014 | 0.05 | 0.086 | 0.279 | 0.780 |
| | inter_pu_neuro | 0.089 | 0.014 | 0.368 | 6.312 | 0.000 |

Table 4-5f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 1.982 | 0.206 | | 9.605 | 0.000 |
| | Extraversion | -0.049 | 0.152 | -0.055 | -0.324 | 0.746 |
| | Agreeableness | 0.039 | 0.185 | 0.04 | 0.21 | 0.834 |
| | Conscientiousness | -0.039 | 0.208 | -0.038 | -0.188 | 0.851 |
| | Neuroticism | -0.329 | 0.065 | -0.319 | -5.03 | 0.000 |
| | Open_Exper | 0.138 | 0.26 | 0.117 | 0.53 | 0.597 |
| | pu | 0.040 | 0.210 | 0.040 | 0.190 | 0.842 |
| | inter_pu_extra | 0.07 | 0.043 | 0.452 | 1.642 | 0.101 |
| | inter_pu_agree | 0.018 | 0.052 | 0.113 | 0.335 | 0.738 |
| | inter_pu_consc | 0.018 | 0.054 | 0.11 | 0.327 | 0.744 |
| | inter_pu_neuro | 0.091 | 0.016 | 0.374 | 5.617 | 0.000 |
| | inter_pu_open | -0.012 | 0.067 | -0.07 | -0.178 | 0.859 |

Table 4-6a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.362 | 0.155 | | 2.341 | 0.020 |
| | Extraversion | 0.238 | 0.045 | 0.264 | 5.256 | 0.000 |
| | Agreeableness | 0.267 | 0.054 | 0.272 | 4.944 | 0.000 |
| | Conscientiousness | 0.181 | 0.062 | 0.175 | 2.895 | 0.004 |
| | Neuroticism | -0.032 | 0.028 | -0.031 | -1.152 | 0.250 |
| | pu | 0.030 | 0.025 | 0.029 | 10150 | 0.243 |
| | Open_Exper | 0.265 | 0.083 | 0.225 | 3.210 | 0.001 |

Table 4-6b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 1.336 | 0.194 | | 6.901 | 0.000 |
| | Extraversion | -0.189 | 0.071 | -0.209 | -2.673 | 0.008 |
| | Agreeableness | 0.103 | 0.055 | 0.105 | 1.882 | 0.061 |
| | Conscientiousness | 0.132 | 0.058 | 0.128 | 2.262 | 0.024 |
| | Neuroticism | -0.011 | 0.026 | -0.011 | -0.440 | 0.660 |
| | Open_Exper | 0.134 | 0.079 | 0.113 | 1.695 | 0.091 |
| | pu | 0.012 | 0.028 | 0.012 | 0.452 | 0.621 |
| | inter_pu_extra | 0.120 | 0.016 | 0.770 | 7.524 | 0.000 |

Table 4-6c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 1.558 | 0.208 | | 7.489 | 0.000 |
| | Extraversion | 0.115 | 0.131 | 0.128 | 0.881 | 0.379 |
| | Agreeableness | -0.275 | 0.148 | -0.280 | -1.865 | 0.063 |
| | Conscientiousness | 0.088 | 0.060 | 0.085 | 1.461 | 0.145 |
| | Neuroticism | -0.012 | 0.026 | -0.012 | -0.484 | 0.629 |
| | Open_Exper | 0.120 | 0.078 | 0.102 | 1.529 | 0.127 |
| | pu | 0.012 | 0.025 | 0.012 | 0.482 | 0.629 |
| | inter_pu_extra | 0.028 | 0.037 | 0.178 | 0.752 | 0.452 |
| | inter_pu_agree | 0.111 | 0.040 | 0.708 | 2.757 | 0.006 |

Table 4-6d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 1.571 | 0.209 | | 7.502 | 0.000 |
| | Extraversion | 0.154 | 0.146 | 0.170 | 1.052 | 0.294 |
| | Agreeableness | -0.212 | 0.183 | -0.215 | -1.156 | 0.248 |
| | Conscientiousness | -0.027 | 0.204 | -0.026 | -0.134 | 0.894 |
| | Neuroticism | -0.013 | 0.026 | -0.012 | -0.494 | 0.621 |
| | Open_Exper | 0.123 | 0.079 | 0.104 | 1.564 | 0.119 |
| | pu | 0.010 | 0.020 | 0.010 | 0.400 | 0.653 |
| | inter_pu_extra | 0.017 | 0.041 | 0.110 | 0.415 | 0.678 |
| | inter_pu_agree | 0.091 | 0.052 | 0.584 | 1.754 | 0.080 |
| | inter_pu_consc | 0.032 | 0.054 | 0.197 | 0.591 | 0.555 |

Table 4-6e: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 5 | (Constant) | 1.957 | 0.215 | | 9.097 | 0.000 |
| | Extraversion | 0.099 | 0.141 | 0.109 | 0.699 | 0.485 |
| | Agreeableness | -0.041 | 0.180 | -0.042 | -0.229 | 0.819 |
| | Conscientiousness | -0.058 | 0.196 | -0.056 | -0.295 | 0.768 |
| | Neuroticism | -0.297 | 0.060 | -0.287 | -4.965 | 0.000 |
| | Open_Exper | 0.120 | 0.076 | 0.102 | 1.584 | 0.114 |
| | pu | 0.025 | 0.520 | 0.024 | 0.152 | 0.856 |
| | inter_pu_extra | 0.025 | 0.040 | 0.157 | 0.615 | 0.539 |
| | inter_pu_agree | 0.039 | 0.051 | 0.246 | 0.753 | 0.452 |
| | inter_pu_consc | 0.031 | 0.052 | 0.191 | 0.594 | 0.553 |
| | inter_pu_neuro | 0.077 | 0.015 | 0.318 | 5.226 | 0.000 |

Coefficients[a]

Table 4-6f: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 6 | (Constant) | 1.958 | 0.216 | | 9.069 | 0.000 |
| | Extraversion | 0.093 | 0.159 | 0.103 | 0.581 | 0.561 |
| | Agreeableness | -0.047 | 0.194 | -0.048 | -0.243 | 0.808 |
| | Conscientiousness | -0.066 | 0.217 | -0.064 | -0.303 | 0.762 |
| | Neuroticism | -0.300 | 0.068 | -0.290 | -4.380 | 0.000 |
| | Open_Exper | 0.142 | 0.272 | 0.121 | 0.522 | 0.602 |
| | pu | 0.042 | 0.222 | 0.039 | 0.218 | 0.856 |
| | inter_pu_extra | 0.026 | 0.045 | 0.168 | 0.584 | 0.559 |
| | inter_pu_agree | 0.040 | 0.055 | 0.257 | 0.732 | 0.465 |
| | inter_pu_consc | 0.033 | 0.057 | 0.203 | 0.576 | 0.565 |
| | inter_pu_neuro | 0.078 | 0.017 | 0.321 | 4.620 | 0.000 |
| | inter_pu_open | -0.006 | 0.070 | -0.034 | -0.084 | 0.933 |

Coefficients[a]

Table 4-7a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.326 | 0.161 | | 2.025 | 0.044 |
| | Extraversion | 0.272 | 0.047 | 0.297 | 5.761 | 0.000 |
| | Agreeableness | 0.290 | 0.056 | 0.291 | 5.144 | 0.000 |
| | Conscientiousness | 0.162 | 0.065 | 0.155 | 2.492 | 0.013 |
| | Neuroticism | -0.029 | 0.029 | -0.028 | -1.013 | 0.312 |
| | pu | 0.028 | 0.038 | 0.028 | 1.012 | 0.312 |
| | Open_Exper | 0.224 | 0.086 | 0.188 | 2.606 | 0.010 |

Table 4-7b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.424 | 0.199 | | 7.164 | 0.000 |
| | Extraversion | -0.210 | 0.073 | -0.229 | -2.890 | 0.004 |
| | Agreeableness | 0.105 | 0.056 | 0.105 | 1.856 | 0.064 |
| | Conscientiousness | 0.107 | 0.060 | 0.102 | 1.787 | 0.075 |
| | Neuroticism | -0.006 | 0.027 | -0.006 | -0.229 | 0.819 |
| | Open_Exper | 0.076 | 0.081 | 0.064 | 0.937 | 0.349 |
| | pu | 0.060 | 0.075 | 0.059 | 0.853 | 0.308 |
| | inter_pu_extra | 0.136 | 0.016 | 0.857 | 8.261 | 0.000 |

Table 4-7c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.600 | 0.215 | | 7.452 | 0.000 |
| | Extraversion | 0.030 | 0.135 | 0.033 | 0.223 | 0.824 |
| | Agreeableness | -0.194 | 0.152 | -0.195 | -1.273 | 0.204 |
| | Conscientiousness | 0.072 | 0.062 | 0.069 | 1.165 | 0.245 |
| | Neuroticism | -0.007 | 0.027 | -0.007 | -0.260 | 0.795 |
| | Open_Exper | 0.065 | 0.081 | 0.054 | 0.804 | 0.422 |
| | pu | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_pu_extra | 0.063 | 0.038 | 0.397 | 1.642 | 0.102 |
| | inter_pu_agree | 0.087 | 0.041 | 0.552 | 2.107 | 0.036 |

Table 4-7d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.625 | 0.216 | | 7.530 | 0.000 |
| | Extraversion | 0.104 | 0.151 | 0.114 | 0.693 | 0.489 |
| | Agreeableness | -0.071 | 0.189 | -0.071 | -0.376 | 0.707 |
| | Conscientiousness | -0.149 | 0.210 | -0.143 | -0.713 | 0.476 |
| | Neuroticism | -0.007 | 0.027 | -0.007 | -0.281 | 0.779 |
| | Open_Exper | 0.071 | 0.081 | 0.059 | 0.877 | 0.381 |
| | pu | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_pu_extra | 0.042 | 0.043 | 0.266 | 0.988 | 0.324 |
| | inter_pu_agree | 0.050 | 0.054 | 0.314 | 0.927 | 0.354 |
| | inter_pu_consc | 0.061 | 0.055 | 0.375 | 1.107 | 0.269 |

Table 4-7e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 2.009 | 0.222 | | 9.039 | 0.000 |
| | Extraversion | 0.050 | 0.146 | 0.054 | 0.341 | 0.734 |
| | Agreeableness | 0.099 | 0.185 | 0.099 | 0.533 | 0.595 |
| | Conscientiousness | -0.180 | 0.203 | -0.172 | -0.888 | 0.375 |
| | Neuroticism | -0.290 | 0.062 | -0.277 | -4.699 | 0.000 |
| | Open_Exper | 0.068 | 0.078 | 0.057 | 0.871 | 0.384 |
| | pu | 0.002 | 0.042 | 0.002 | 1.110 | 0.286 |
| | inter_pu_extra | 0.049 | 0.041 | 0.312 | 1.199 | 0.231 |
| | inter_pu_agree | -0.003 | 0.053 | -0.017 | -0.052 | 0.959 |
| | inter_pu_consc | 0.060 | 0.054 | 0.369 | 1.126 | 0.261 |
| | inter_pu_neuro | 0.077 | 0.015 | 0.312 | 5.034 | 0.000 |

Table 4-7f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 2.027 | 0.223 | | 9.106 | 0.000 |
| | Extraversion | -0.042 | 0.164 | -0.046 | -0.255 | 0.799 |
| | Agreeableness | 0.008 | 0.200 | 0.008 | 0.042 | 0.966 |
| | Conscientiousness | -0.296 | 0.224 | -0.283 | -1.321 | 0.187 |
| | Neuroticism | -0.332 | 0.071 | -0.317 | -4.703 | 0.000 |
| | Open_Exper | 0.396 | 0.281 | 0.332 | 1.410 | 0.159 |
| | pu | 0.007 | 0.196 | 0.007 | 0.037 | 0.969 |
| | inter_pu_extra | 0.075 | 0.046 | 0.475 | 1.623 | 0.105 |
| | inter_pu_agree | 0.022 | 0.057 | 0.138 | 0.385 | 0.700 |
| | inter_pu_consc | 0.089 | 0.059 | 0.546 | 1.524 | 0.128 |
| | inter_pu_neuro | 0.087 | 0.017 | 0.354 | 5.004 | 0.000 |
| | inter_pu_open | -0.088 | 0.072 | -0.506 | -1.215 | 0.225 |

Table 4-8a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.367 | 0.153 | | 2.389 | 0.017 |
| | Extraversion | 0.293 | 0.045 | 0.324 | 6.527 | 0.000 |
| | Agreeableness | 0.291 | 0.054 | 0.295 | 5.421 | 0.000 |
| | Conscientiousness | 0.198 | 0.062 | 0.192 | 3.204 | 0.001 |
| | Neuroticism | -0.031 | 0.028 | -0.030 | -1.136 | 0.257 |
| | pu | 0.030 | 0.019 | 0.030 | 1.128 | 0.369 |
| | Open_Exper | 0.155 | 0.082 | 0.131 | 1.888 | 0.060 |

Table 4-8b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.410 | 0.189 | | 7.448 | 0.000 |
| | Extraversion | -0.165 | 0.069 | -0.182 | -2.381 | 0.018 |
| | Agreeableness | 0.115 | 0.054 | 0.116 | 2.138 | 0.033 |
| | Conscientiousness | 0.146 | 0.057 | 0.141 | 2.558 | 0.011 |
| | Neuroticism | -0.009 | 0.025 | -0.009 | -0.364 | 0.716 |
| | Open_Exper | 0.014 | 0.077 | 0.012 | 0.177 | 0.860 |
| | pu | 0.005 | 0.019 | 0.004 | 0.294 | 0.879 |
| | inter_pu_extra | 0.129 | 0.016 | 0.825 | 8.246 | 0.000 |

Table 4-8c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 1.536 | 0.205 | | 7.494 | 0.000 |
| | Extraversion | 0.007 | 0.129 | 0.008 | 0.058 | 0.954 |
| | Agreeableness | -0.100 | 0.145 | -0.101 | -0.684 | 0.494 |
| | Conscientiousness | 0.121 | 0.059 | 0.117 | 2.046 | 0.042 |
| | Neuroticism | -0.010 | 0.025 | -0.009 | -0.387 | 0.699 |
| | Open_Exper | 0.006 | 0.077 | 0.005 | 0.075 | 0.940 |
| | pu | 0.004 | 0.054 | 0.004 | 0.070 | 0.957 |
| | inter_pu_extra | 0.077 | 0.036 | 0.490 | 2.099 | 0.037 |
| | inter_pu_agree | 0.063 | 0.040 | 0.401 | 1.584 | 0.114 |

Table 4-8d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 1.544 | 0.206 | | 7.485 | 0.000 |
| | Extraversion | 0.033 | 0.144 | 0.036 | 0.228 | 0.820 |
| | Agreeableness | -0.058 | 0.180 | -0.059 | -0.320 | 0.749 |
| | Conscientiousness | 0.046 | 0.200 | 0.044 | 0.227 | 0.820 |
| | Neuroticism | -0.010 | 0.025 | -0.010 | -0.394 | 0.694 |
| | Open_Exper | 0.008 | 0.077 | 0.007 | 0.101 | 0.919 |
| | pu | 0.006 | 0.070 | 0.005 | 0.089 | 0.945 |
| | inter_pu_extra | 0.070 | 0.041 | 0.445 | 1.710 | 0.088 |
| | inter_pu_agree | 0.050 | 0.051 | 0.319 | 0.973 | 0.331 |
| | inter_pu_consc | 0.021 | 0.053 | 0.129 | 0.394 | 0.694 |

Table 4-8e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 1.923 | 0.212 | | 9.073 | 0.000 |
| | Extraversion | -0.021 | 0.139 | -0.023 | -0.152 | 0.879 |
| | Agreeableness | 0.110 | 0.177 | 0.112 | 0.621 | 0.535 |
| | Conscientiousness | 0.015 | 0.194 | 0.015 | 0.079 | 0.937 |
| | Neuroticism | -0.289 | 0.059 | -0.280 | -4.908 | 0.000 |
| | Open_Exper | 0.005 | 0.075 | 0.004 | 0.068 | 0.946 |
| | pu | 0.001 | 0.045 | 0.001 | 0.020 | 0.968 |
| | inter_pu_extra | 0.077 | 0.039 | 0.492 | 1.955 | 0.051 |
| | inter_pu_agree | -0.002 | 0.050 | -0.012 | -0.038 | 0.970 |
| | inter_pu_consc | 0.020 | 0.051 | 0.123 | 0.390 | 0.697 |
| | inter_pu_neuro | 0.076 | 0.015 | 0.312 | 5.210 | 0.000 |

Table 4-8f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 1.930 | 0.213 | | 9.076 | 0.000 |
| | Extraversion | -0.057 | 0.157 | -0.063 | -0.363 | 0.717 |
| | Agreeableness | 0.075 | 0.191 | 0.076 | 0.391 | 0.696 |
| | Conscientiousness | -0.030 | 0.214 | -0.029 | -0.139 | 0.889 |
| | Neuroticism | -0.306 | 0.067 | -0.295 | -4.531 | 0.000 |
| | Open_Exper | 0.133 | 0.268 | 0.113 | 0.496 | 0.621 |
| | pu | 0.025 | 0.125 | 0.023 | 0.128 | 0.791 |
| | inter_pu_extra | 0.087 | 0.044 | 0.556 | 1.963 | 0.050 |
| | inter_pu_agree | 0.008 | 0.054 | 0.049 | 0.142 | 0.887 |
| | inter_pu_consc | 0.031 | 0.056 | 0.193 | 0.558 | 0.577 |
| | inter_pu_neuro | 0.080 | 0.017 | 0.328 | 4.805 | 0.000 |
| | inter_pu_open | -0.034 | 0.069 | -0.200 | -0.496 | 0.620 |

Table 4-9a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.276 | 0.153 | | 1.806 | 0.072 |
| | Extraversion | 0.252 | 0.045 | 0.280 | 5.630 | 0.000 |
| | Agreeableness | 0.295 | 0.053 | 0.300 | 5.518 | 0.000 |
| | Conscientiousness | 0.154 | 0.062 | 0.149 | 2.498 | 0.013 |
| | Neuroticism | -0.017 | 0.027 | -0.017 | -0.626 | 0.532 |
| | peou | 0.015 | 0.020 | 0.015 | 0.568 | 0.539 |
| | pu | 0.017 | 0.029 | 0.017 | 0.626 | 0.532 |
| | Open_Exper | 0.252 | 0.082 | 0.214 | 3.086 | 0.002 |

Table 4-9b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.318 | 0.157 | | 2.034 | 0.043 |
| | Extraversion | 0.238 | 0.046 | 0.264 | 5.159 | 0.000 |
| | Agreeableness | 0.303 | 0.054 | 0.308 | 5.630 | 0.000 |
| | Conscientiousness | 0.169 | 0.063 | 0.163 | 2.687 | 0.008 |
| | Neuroticism | -0.023 | 0.028 | -0.022 | -0.818 | 0.414 |
| | Open_Exper | 0.220 | 0.086 | 0.187 | 2.568 | 0.011 |
| | peou | 0.001 | 0.010 | 0.001 | 1.345 | 0.330 |
| | pu | 0.003 | 0.011 | 0.003 | 1.128 | 0.210 |
| | inter_peou_pu_extra | 0.002 | 0.001 | 0.040 | 1.240 | 0.216 |

Table 4-9c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.262 | 0.158 | | 1.661 | 0.098 |
| | Extraversion | 0.082 | 0.087 | 0.091 | 0.940 | 0.348 |
| | Agreeableness | 0.446 | 0.086 | 0.455 | 5.177 | 0.000 |
| | Conscientiousness | 0.191 | 0.063 | 0.185 | 3.014 | 0.003 |
| | Neuroticism | -0.017 | 0.028 | -0.017 | -0.614 | 0.540 |
| | Open_Exper | 0.229 | 0.085 | 0.195 | 2.681 | 0.008 |
| | peou | 0.010 | 0.092 | 0.009 | 2.568 | 0.564 |
| | pu | 0.012 | 0.076 | 0.011 | 3.845 | 0.522 |
| | inter_peou_pu_extra | 0.017 | 0.007 | 0.412 | 2.312 | 0.021 |
| | inter_peou_pu_agree | -0.016 | 0.008 | -0.365 | -2.123 | 0.034 |

Table 4-9d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.260 | 0.158 | | 1.641 | 0.102 |
| | Extraversion | 0.088 | 0.090 | 0.098 | 0.976 | 0.330 |
| | Agreeableness | 0.467 | 0.116 | 0.476 | 4.019 | 0.000 |
| | Conscientiousness | 0.162 | 0.127 | 0.157 | 1.277 | 0.202 |
| | Neuroticism | -0.017 | 0.028 | -0.016 | -0.608 | 0.544 |
| | Open_Exper | 0.231 | 0.086 | 0.196 | 2.691 | 0.007 |
| | peou | 0.002 | 0.079 | 0.002 | 0.285 | 0.857 |
| | pu | 0.003 | 0.85 | 0.003 | 0.279 | 0.726 |
| | inter_peou_pu_extra | 0.016 | 0.008 | 0.397 | 2.114 | 0.035 |
| | inter_peou_pu_agree | -0.018 | 0.011 | -0.416 | -1.614 | 0.107 |
| | inter_peou_pu_consc | 0.003 | 0.011 | 0.065 | 0.266 | 0.790 |

Table 4-9e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.407 | 0.161 | | 2.531 | 0.012 |
| | Extraversion | 0.066 | 0.089 | 0.073 | 0.739 | 0.460 |
| | Agreeableness | 0.540 | 0.116 | 0.550 | 4.661 | 0.000 |
| | Conscientiousness | 0.148 | 0.124 | 0.143 | 1.186 | 0.237 |
| | Neuroticism | -0.172 | 0.050 | -0.167 | -3.430 | 0.001 |
| | Open_Exper | 0.254 | 0.085 | 0.216 | 3.004 | 0.003 |
| | peou | 0.003 | 0.956 | 0.003 | 0.158 | 0.700 |
| | pu | 0.001 | 0.851 | 0.001 | 0.147 | 0.792 |
| | inter_peou_pu_extra | 0.016 | 0.008 | 0.379 | 2.054 | 0.041 |
| | inter_peou_pu_agree | -0.029 | 0.012 | -0.647 | -2.480 | 0.014 |
| | inter_peou_pu_consc | 0.003 | 0.011 | 0.060 | 0.251 | 0.802 |
| | inter_peou_pu_neuro | 0.017 | 0.005 | 0.301 | 3.690 | 0.000 |

Table 4-9f: Impact of Individual Predictors on Dependent Variable

| **Coefficients**[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.412 | 0.161 | | 2.560 | 0.011 |
| | Extraversion | 0.121 | 0.104 | 0.134 | 1.163 | 0.246 |
| | Agreeableness | 0.587 | 0.124 | 0.598 | 4.712 | 0.000 |
| | Conscientiousness | 0.186 | 0.130 | 0.181 | 1.432 | 0.153 |
| | Neuroticism | -0.165 | 0.051 | -0.160 | -3.271 | 0.001 |
| | Open_Exper | 0.105 | 0.168 | 0.090 | 0.627 | 0.531 |
| | peou | 0.009 | 0.523 | 0.008 | 0.049 | 0.979 |
| | pu | 0.010 | 0.894 | 0.010 | 0.050 | 0.920 |
| | inter_peou_pu_extra | 0.010 | 0.009 | 0.238 | 1.033 | 0.302 |
| | inter_peou_pu_agree | -0.034 | 0.013 | -0.762 | -2.683 | 0.008 |
| | inter_peou_pu_consc | 0.000 | 0.011 | -0.018 | -0.072 | 0.942 |
| | inter_peou_pu_neuro | 0.017 | 0.005 | 0.298 | 3.656 | 0.000 |
| | inter_peou_pu_open | 0.015 | 0.014 | 0.338 | 1.024 | 0.307 |

Table 4-10a: Impact of Individual Predictors on Dependent Variable

| **Coefficients**[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.362 | 0.155 | | 2.341 | 0.020 |
| | Extraversion | 0.238 | 0.045 | 0.264 | 5.256 | 0.000 |
| | Agreeableness | 0.267 | 0.054 | 0.272 | 4.944 | 0.000 |
| | Conscientiousness | 0.181 | 0.062 | 0.175 | 2.895 | 0.004 |
| | Neuroticism | -0.032 | 0.028 | -0.031 | -1.152 | 0.250 |
| | peou | 0.027 | 0.082 | 0.027 | 1.489 | 0.501 |
| | pu | 0.029 | 0.056 | 0.028 | 1.582 | 0.500 |
| | Open_Exper | 0.265 | 0.083 | 0.225 | 3.210 | 0.001 |

Table 4-10b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.393 | 0.159 | | 2.479 | 0.014 |
| | Extraversion | 0.228 | 0.047 | 0.252 | 4.875 | 0.000 |
| | Agreeableness | 0.273 | 0.054 | 0.278 | 5.014 | 0.000 |
| | Conscientiousness | 0.191 | 0.064 | 0.185 | 3.011 | 0.003 |
| | Neuroticism | -0.036 | 0.028 | -0.035 | -1.281 | 0.201 |
| | Open_Exper | 0.242 | 0.087 | 0.205 | 2.787 | 0.006 |
| | peou | 0.030 | 0.792 | 0.029 | 1.250 | 0.253 |
| | pu | 0.032 | 0.549 | 0.030 | 1.256 | 0.240 |
| | inter_peou_pu_extra | 0.001 | 0.001 | 0.029 | 0.896 | 0.371 |

Table 4-10c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.363 | 0.161 | | 2.256 | 0.025 |
| | Extraversion | 0.143 | 0.088 | 0.158 | 1.615 | 0.107 |
| | Agreeableness | 0.351 | 0.088 | 0.357 | 4.005 | 0.000 |
| | Conscientiousness | 0.203 | 0.064 | 0.197 | 3.158 | 0.002 |
| | Neuroticism | -0.033 | 0.028 | -0.032 | -1.167 | 0.244 |
| | Open_Exper | 0.247 | 0.087 | 0.209 | 2.840 | 0.005 |
| | peou | 0.006 | 0.891 | 0.006 | 1.110 | 0.265 |
| | pu | 0.002 | 0.765 | 0.002 | 1.106 | 0.267 |
| | inter_peou_pu_extra | 0.009 | 0.007 | 0.231 | 1.279 | 0.202 |
| | inter_peou_pu_agree | -0.009 | 0.008 | -0.198 | -1.137 | 0.257 |

Table 4-10d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.357 | 0.161 | | 2.214 | 0.027 |
| | Extraversion | 0.159 | 0.092 | 0.176 | 1.732 | 0.084 |
| | Agreeableness | 0.403 | 0.118 | 0.410 | 3.411 | 0.001 |
| | Conscientiousness | 0.131 | 0.129 | 0.126 | 1.014 | 0.311 |
| | Neuroticism | -0.033 | 0.028 | -0.032 | -1.152 | 0.250 |
| | Open_Exper | 0.252 | 0.087 | 0.214 | 2.886 | 0.004 |
| | peou | 0.020 | 0.089 | 0.020 | 1.119 | 0.345 |
| | pu | 0.023 | 0.534 | 0.023 | 1.124 | 0.301 |
| | inter_peou_pu_extra | 0.008 | 0.008 | 0.193 | 1.013 | 0.312 |
| | inter_peou_pu_agree | -0.014 | 0.012 | -0.326 | -1.245 | 0.214 |
| | inter_peou_pu_consc | 0.007 | 0.011 | 0.162 | 0.654 | 0.514 |

Table 4-10e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.498 | 0.164 | | 3.038 | 0.003 |
| | Extraversion | 0.138 | 0.091 | 0.152 | 1.517 | 0.130 |
| | Agreeableness | 0.473 | 0.118 | 0.481 | 4.008 | 0.000 |
| | Conscientiousness | 0.117 | 0.127 | 0.113 | 0.923 | 0.357 |
| | Neuroticism | -0.182 | 0.051 | -0.175 | -3.552 | 0.000 |
| | Open_Exper | 0.274 | 0.086 | 0.233 | 3.180 | 0.002 |
| | peou | 0.001 | 0.47 | 0.001 | 0.856 | 0.562 |
| | pu | 0.002 | 0.59 | 0.002 | 0.912 | 0.517 |
| | inter_peou_pu_extra | 0.007 | 0.008 | 0.176 | 0.938 | 0.349 |
| | inter_peou_pu_agree | -0.024 | 0.012 | -0.547 | -2.062 | 0.040 |
| | inter_peou_pu_consc | 0.007 | 0.011 | 0.157 | 0.646 | 0.519 |
| | inter_peou_pu_neuro | 0.017 | 0.005 | 0.288 | 3.476 | 0.001 |

Table 4-10f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.500 | 0.164 | | 3.050 | 0.002 |
| | Extraversion | 0.167 | 0.106 | 0.185 | 1.575 | 0.116 |
| | Agreeableness | 0.498 | 0.127 | 0.506 | 3.922 | 0.000 |
| | Conscientiousness | 0.138 | 0.133 | 0.133 | 1.038 | 0.300 |
| | Neuroticism | -0.178 | 0.052 | -0.172 | -3.450 | 0.001 |
| | Open_Exper | 0.194 | 0.171 | 0.165 | 1.135 | 0.257 |
| | peou | 0.007 | 0.582 | 0.007 | 0.416 | 0.599 |
| | pu | 0.008 | 0.421 | 0.008 | 0.418 | 0.595 |
| | inter_peou_pu_extra | 0.004 | 0.010 | 0.101 | 0.429 | 0.668 |
| | inter_peou_pu_agree | -0.027 | 0.013 | -0.608 | -2.105 | 0.036 |
| | inter_peou_pu_consc | 0.005 | 0.012 | 0.115 | 0.451 | 0.652 |
| | inter_peou_pu_neuro | 0.017 | 0.005 | 0.287 | 3.454 | 0.001 |
| | inter_peou_pu_open | 0.008 | 0.015 | 0.181 | 0.537 | 0.591 |

Table 4-11a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.326 | 0.161 | | 2.025 | 0.044 |
| | Extraversion | 0.272 | 0.047 | 0.297 | 5.761 | 0.000 |
| | Agreeableness | 0.290 | 0.056 | 0.291 | 5.144 | 0.000 |
| | Conscientiousness | 0.162 | 0.065 | 0.155 | 2.492 | 0.013 |
| | Neuroticism | -0.029 | 0.029 | -0.028 | -1.013 | 0.312 |
| | peou | 0.025 | 0.089 | 0.024 | 1.010 | 0.320 |
| | pu | 0.030 | 0.074 | 0.029 | 0.016 | 0.308 |
| | Open_Exper | 0.224 | 0.086 | 0.188 | 2.606 | 0.010 |

Table 4-11b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.331 | 0.165 | | 2.004 | 0.046 |
| | Extraversion | 0.270 | 0.049 | 0.295 | 5.544 | 0.000 |
| | Agreeableness | 0.291 | 0.057 | 0.292 | 5.117 | 0.000 |
| | Conscientiousness | 0.164 | 0.066 | 0.156 | 2.471 | 0.014 |
| | Neuroticism | -0.030 | 0.029 | -0.029 | -1.021 | 0.308 |
| | peou | 0.002 | 0.712 | 0.002 | 0.130 | 0.899 |
| | pu | 0.004 | 0.853 | 0.004 | 0.135 | 0.886 |
| | Open_Exper | 0.221 | 0.090 | 0.185 | 2.439 | 0.015 |
| | inter_peou_pu_extra | 0.000 | 0.001 | 0.005 | 0.138 | 0.890 |

Table 4-11c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.277 | 0.167 | | 1.660 | 0.098 |
| | Extraversion | 0.119 | 0.092 | 0.130 | 1.298 | 0.195 |
| | Agreeableness | 0.429 | 0.091 | 0.431 | 4.710 | 0.000 |
| | Conscientiousness | 0.185 | 0.067 | 0.177 | 2.767 | 0.006 |
| | Neuroticism | -0.024 | 0.029 | -0.023 | -0.834 | 0.405 |
| | Open_Exper | 0.229 | 0.090 | 0.192 | 2.540 | 0.012 |
| | peou | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |
| | pu | 0.017 | 0.630 | 0.017 | 0.723 | 0.458 |
| | inter_peou_pu_extra | 0.015 | 0.008 | 0.359 | 1.933 | 0.054 |
| | inter_peou_pu_agree | -0.016 | 0.008 | -0.347 | -1.939 | 0.053 |

Table 4-11d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.263 | 0.167 | | 1.574 | 0.116 |
| | Extraversion | 0.160 | 0.095 | 0.175 | 1.679 | 0.094 |
| | Agreeableness | 0.556 | 0.122 | 0.558 | 4.546 | 0.000 |
| | Conscientiousness | 0.006 | 0.133 | 0.005 | 0.043 | 0.966 |
| | Neuroticism | -0.024 | 0.029 | -0.022 | -0.802 | 0.423 |
| | Open_Exper | 0.242 | 0.090 | 0.203 | 2.677 | 0.008 |
| | peou | 0.015 | 0.025 | 0.014 | 0.721 | 0.462 |
| | pu | 0.020 | 0.084 | 0.020 | 0.785 | 0.436 |
| | inter_peou_pu_extra | 0.011 | 0.008 | 0.265 | 1.363 | 0.174 |
| | inter_peou_pu_agree | -0.030 | 0.012 | -0.657 | -2.454 | 0.015 |
| | inter_peou_pu_consc | 0.018 | 0.012 | 0.393 | 1.554 | 0.121 |

Table 4-11e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.408 | 0.170 | | 2.403 | 0.017 |
| | Extraversion | 0.138 | 0.094 | 0.151 | 1.464 | 0.144 |
| | Agreeableness | 0.629 | 0.122 | 0.631 | 5.140 | 0.000 |
| | Conscientiousness | -0.008 | 0.131 | -0.008 | -0.063 | 0.950 |
| | Neuroticism | -0.177 | 0.053 | -0.169 | -3.343 | 0.001 |
| | Open_Exper | 0.265 | 0.089 | 0.222 | 2.966 | 0.003 |
| | peou | 0.009 | 0.056 | 0.009 | 0.075 | 0.861 |
| | pu | 0.010 | 0.047 | 0.010 | 0.086 | 0.810 |
| | inter_peou_pu_extra | 0.010 | 0.008 | 0.248 | 1.293 | 0.197 |
| | inter_peou_pu_agree | -0.040 | 0.012 | -0.882 | -3.249 | 0.001 |
| | inter_peou_pu_consc | 0.018 | 0.011 | 0.389 | 1.560 | 0.120 |
| | inter_peou_pu_neuro | 0.017 | 0.005 | 0.293 | 3.458 | 0.001 |

Table 4-11f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.412 | 0.170 | | 2.425 | 0.016 |
| | Extraversion | 0.184 | 0.110 | 0.201 | 1.673 | 0.095 |
| | Agreeableness | 0.668 | 0.132 | 0.670 | 5.077 | 0.000 |
| | Conscientiousness | 0.024 | 0.137 | 0.023 | 0.177 | 0.860 |
| | Neuroticism | -0.172 | 0.053 | -0.164 | -3.209 | 0.001 |
| | Open_Exper | 0.140 | 0.178 | 0.118 | 0.790 | 0.430 |
| | peou | 0.015 | 0.372 | 0.015 | 0.152 | 0.917 |
| | pu | 0.018 | 0.250 | 0.018 | 0.184 | 0.873 |
| | inter_peou_pu_extra | 0.005 | 0.010 | 0.132 | 0.549 | 0.583 |
| | inter_peou_pu_agree | -0.044 | 0.013 | -0.977 | -3.305 | 0.001 |
| | inter_peou_pu_consc | 0.015 | 0.012 | 0.324 | 1.238 | 0.217 |
| | inter_peou_pu_neuro | 0.017 | 0.005 | 0.291 | 3.429 | 0.001 |
| | inter_peou_pu_open | 0.012 | 0.015 | 0.279 | 0.812 | 0.417 |

Table 4-12a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.367 | 0.153 | | 2.389 | 0.017 |
| | Extraversion | 0.293 | 0.045 | 0.324 | 6.527 | 0.000 |
| | Agreeableness | 0.291 | 0.054 | 0.295 | 5.421 | 0.000 |
| | Conscientiousness | 0.198 | 0.062 | 0.192 | 3.204 | 0.001 |
| | Neuroticism | -0.031 | 0.028 | -0.030 | -1.136 | 0.257 |
| | peou | 0.030 | 0.046 | 0.030 | 1.134 | 0.256 |
| | pu | 0.025 | 0.081 | 0.025 | 1.129 | 0.286 |
| | Open_Exper | 0.155 | 0.082 | 0.131 | 1.888 | 0.060 |

Table 4-12b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.379 | 0.157 | | 2.407 | 0.017 |
| | Extraversion | 0.289 | 0.046 | 0.320 | 6.233 | 0.000 |
| | Agreeableness | 0.293 | 0.054 | 0.298 | 5.418 | 0.000 |
| | Conscientiousness | 0.202 | 0.063 | 0.196 | 3.210 | 0.001 |
| | Neuroticism | -0.033 | 0.028 | -0.032 | -1.177 | 0.240 |
| | Open_Exper | 0.145 | 0.086 | 0.123 | 1.690 | 0.092 |
| | peou | 0.001 | 0.065 | 0.001 | 1.157 | 0.312 |
| | pu | 0.000 | 0.047 | 0.001 | 1.154 | 0.313 |
| | inter_peou_pu_extra | 0.000 | 0.001 | 0.011 | 0.357 | 0.722 |

Table 4-12c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.325 | 0.159 | | 2.045 | 0.042 |
| | Extraversion | 0.139 | 0.087 | 0.154 | 1.590 | 0.113 |
| | Agreeableness | 0.431 | 0.087 | 0.438 | 4.969 | 0.000 |
| | Conscientiousness | 0.224 | 0.064 | 0.216 | 3.515 | 0.000 |
| | Neuroticism | -0.027 | 0.028 | -0.027 | -0.982 | 0.327 |
| | Open_Exper | 0.154 | 0.086 | 0.131 | 1.794 | 0.074 |
| | inter_peou_pu_extra | 0.015 | 0.007 | 0.368 | 2.060 | 0.040 |
| | peou | 0.013 | 0.074 | 0.013 | 0.846 | 0.425 |
| | pu | -0.018 | 0.069 | -0.018 | 0.921 | 0.420 |
| | inter_peou_pu_agree | -0.016 | 0.008 | -0.350 | -2.028 | 0.043 |

Table 4-12d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.325 | 0.159 | | 2.042 | 0.042 |
| | Extraversion | 0.138 | 0.091 | 0.152 | 1.512 | 0.131 |
| | Agreeableness | 0.427 | 0.117 | 0.434 | 3.652 | 0.000 |
| | Conscientiousness | 0.229 | 0.127 | 0.222 | 1.802 | 0.072 |
| | Neuroticism | -0.027 | 0.028 | -0.027 | -0.982 | 0.327 |
| | Open_Exper | 0.154 | 0.086 | 0.130 | 1.779 | 0.076 |
| | peou | 0.022 | 0.063 | 0.022 | 0.976 | 0.359 |
| | pu | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | inter_peou_pu_extra | 0.015 | 0.008 | 0.371 | 1.972 | 0.049 |
| | inter_peou_pu_agree | -0.015 | 0.012 | -0.340 | -1.314 | 0.190 |
| | inter_peou_pu_consc | 0.000 | 0.011 | -0.013 | -0.052 | 0.959 |

Table 4-12e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.477 | 0.161 | | 2.956 | 0.003 |
| | Extraversion | 0.114 | 0.089 | 0.127 | 1.277 | 0.202 |
| | Agreeableness | 0.502 | 0.116 | 0.511 | 4.317 | 0.000 |
| | Conscientiousness | 0.215 | 0.125 | 0.208 | 1.719 | 0.087 |
| | Neuroticism | -0.188 | 0.050 | -0.182 | -3.734 | 0.000 |
| | Open_Exper | 0.177 | 0.085 | 0.151 | 2.089 | 0.037 |
| | peou | 0.023 | 0.026 | 0.023 | 0.083 | 0.926 |
| | pu | -0.011 | 0.067 | -0.011 | 0.062 | 0.956 |
| | inter_peou_pu_extra | 0.014 | 0.008 | 0.353 | 1.910 | 0.057 |
| | inter_peou_pu_agree | -0.026 | 0.012 | -0.579 | -2.213 | 0.028 |
| | inter_peou_pu_consc | 0.000 | 0.011 | -0.017 | -0.073 | 0.942 |
| | inter_peou_pu_neuro | 0.018 | 0.005 | 0.311 | 3.804 | 0.000 |

Table 4-12f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.479 | 0.162 | | 2.965 | 0.003 |
| | Extraversion | 0.139 | 0.105 | 0.154 | 1.326 | 0.186 |
| | Agreeableness | 0.523 | 0.125 | 0.532 | 4.178 | 0.000 |
| | Conscientiousness | 0.232 | 0.131 | 0.224 | 1.774 | 0.077 |
| | Neuroticism | -0.185 | 0.051 | -0.179 | -3.641 | 0.000 |
| | Open_Exper | 0.111 | 0.169 | 0.094 | 0.659 | 0.510 |
| | peou | 0.004 | 0.029 | 0.004 | 0.109 | 0.993 |
| | pu | 0.005 | 0.047 | 0.005 | 0.112 | 0.920 |
| | inter_peou_pu_extra | 0.012 | 0.009 | 0.290 | 1.257 | 0.210 |
| | inter_peou_pu_agree | -0.028 | 0.013 | -0.630 | -2.210 | 0.028 |
| | inter_peou_pu_consc | -0.002 | 0.011 | -0.052 | -0.207 | 0.836 |
| | inter_peou_pu_neuro | 0.018 | 0.005 | 0.309 | 3.783 | 0.000 |
| | inter_peou_pu_open | 0.006 | 0.014 | 0.150 | 0.453 | 0.651 |

## APPENDIX F – Task Characteristics and KSB

Table 5-1a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.467 | 0.120 | | 3.880 | 0.000 |
| | Work_Sch_Aut | 0.011 | 0.053 | 0.012 | 0.203 | 0.839 |
| | Des_Mal_Aut | 0.190 | 0.068 | 0.198 | 2.804 | 0.005 |
| | Work_Method_Aut | -0.090 | 0.068 | -0.093 | -1.316 | 0.189 |
| | Task_Var | 0.167 | 0.081 | 0.168 | 2.058 | 0.040 |
| | Task_Sig | 0.286 | 0.079 | 0.305 | 3.606 | 0.000 |
| | Task_Identity | 0.170 | 0.070 | 0.170 | 2.442 | 0.015 |
| | peou | 0.010 | 0.050 | 0.009 | 0.220 | 0.815 |
| | Feedbck_Job | 0.120 | 0.072 | 0.123 | 1.679 | 0.094 |

Table 5-1b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 2 | (Constant) | 0.523 | 0.122 | | 4.303 | 0.000 |
| | Work_Sch_Aut | 0.045 | 0.054 | 0.048 | 0.825 | 0.410 |
| | Des_Mal_Aut | 0.179 | 0.067 | 0.186 | 2.647 | 0.008 |
| | Work_Method_Aut | -0.109 | 0.068 | -0.113 | -1.603 | 0.110 |
| | Task_Var | 0.173 | 0.081 | 0.174 | 2.149 | 0.032 |
| | Task_Sig | 0.313 | 0.079 | 0.333 | 3.937 | 0.000 |
| | Task_Identity | 0.155 | 0.069 | 0.155 | 2.231 | 0.026 |
| | Feedbck_Job | 0.123 | 0.071 | 0.126 | 1.727 | 0.085 |
| | peou | 0.026 | 0.023 | 0.025 | 1.010 | .0215 |
| | inter_peou_wsa | -0.015 | 0.006 | -0.078 | -2.500 | 0.013 |

Table 5-1c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.543 | 0.121 | | 4.475 | 0.000 |
| | Work_Sch_Aut | -0.235 | 0.141 | -0.252 | -1.663 | 0.097 |
| | Des_Mal_Aut | 0.462 | 0.149 | 0.480 | 3.114 | 0.002 |
| | Work_Method_Aut | -0.109 | 0.068 | -0.114 | -1.617 | 0.107 |
| | Task_Var | 0.185 | 0.080 | 0.186 | 2.300 | 0.022 |
| | Task_Sig | 0.301 | 0.079 | 0.321 | 3.798 | 0.000 |
| | Task_Identity | 0.150 | 0.069 | 0.150 | 2.176 | 0.030 |
| | Feedbck_Job | 0.123 | 0.071 | 0.126 | 1.734 | 0.084 |
| | peou | 0.051 | 0.002 | 0.050 | 1.502 | 0.102 |
| | inter_peou_wsa | 0.087 | 0.048 | 0.444 | 1.807 | 0.072 |
| | inter_peou_dma | -0.104 | 0.048 | -0.519 | -2.143 | 0.033 |

Table 5-1d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.550 | 0.121 | | 4.527 | 0.000 |
| | Work_Sch_Aut | -0.287 | 0.148 | -0.309 | -1.941 | 0.053 |
| | Des_Mal_Aut | 0.332 | 0.185 | 0.345 | 1.796 | 0.073 |
| | Work_Method_Aut | 0.078 | 0.173 | 0.081 | 0.453 | 0.651 |
| | Task_Var | 0.184 | 0.080 | 0.186 | 2.294 | 0.022 |
| | Task_Sig | 0.296 | 0.079 | 0.316 | 3.739 | 0.000 |
| | Task_Identity | 0.158 | 0.069 | 0.158 | 2.275 | 0.023 |
| | Feedbck_Job | 0.114 | 0.071 | 0.116 | 1.595 | 0.112 |
| | peou | 0.011 | 0.002 | 0.011 | 0.410 | 0.521 |
| | inter_peou_wsa | 0.105 | 0.051 | 0.538 | 2.083 | 0.038 |
| | inter_peou_dma | -0.059 | 0.062 | -0.292 | -0.946 | 0.345 |
| | inter_peou_wma | -0.064 | 0.054 | -0.318 | -1.180 | 0.239 |

Table 5-1e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.564 | 0.122 | | 4.607 | 0.000 |
| | Work_Sch_Aut | -0.313 | 0.151 | -0.336 | -2.077 | 0.039 |
| | Des_Mal_Aut | 0.255 | 0.203 | 0.265 | 1.257 | 0.210 |
| | Work_Method_Aut | 0.013 | 0.187 | 0.013 | 0.068 | 0.946 |
| | Task_Var | 0.348 | 0.195 | 0.351 | 1.791 | 0.074 |
| | Task_Sig | 0.300 | 0.079 | 0.320 | 3.778 | 0.000 |
| | Task_Identity | 0.157 | 0.069 | 0.157 | 2.265 | 0.024 |
| | Feedbck_Job | 0.111 | 0.071 | 0.114 | 1.558 | 0.120 |
| | peou | 0.011 | 0.03 | 0.011 | 0.374 | 0.708 |
| | inter_peou_wsa | 0.114 | 0.051 | 0.583 | 2.218 | 0.027 |
| | inter_peou_dma | -0.029 | 0.069 | -0.147 | -0.425 | 0.671 |
| | inter_peou_wma | -0.041 | 0.059 | -0.207 | -0.700 | 0.485 |
| | inter_peou_tv | -0.060 | 0.065 | -0.305 | -0.926 | 0.355 |

Table 5-1f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.564 | 0.123 | | 4.603 | 0.000 |
| | Work_Sch_Aut | -0.315 | 0.151 | -0.339 | -2.084 | 0.038 |
| | Des_Mal_Aut | 0.244 | 0.209 | 0.254 | 1.168 | 0.244 |
| | Work_Method_Aut | 0.003 | 0.193 | 0.003 | 0.013 | 0.990 |
| | Task_Var | 0.328 | 0.217 | 0.331 | 1.511 | 0.132 |
| | Task_Sig | 0.343 | 0.217 | 0.365 | 1.577 | 0.116 |
| | Task_Identity | 0.157 | 0.069 | 0.157 | 2.260 | 0.024 |
| | Feedbck_Job | 0.112 | 0.071 | 0.114 | 1.564 | 0.119 |
| | peou | 0.001 | 0.052 | 0.001 | 0.432 | 0.976 |
| | inter_peou_wsa | 0.115 | 0.052 | 0.588 | 2.225 | 0.027 |
| | inter_peou_dma | -0.026 | 0.071 | -0.130 | -0.365 | 0.715 |
| | inter_peou_wma | -0.038 | 0.061 | -0.191 | -0.626 | 0.532 |
| | inter_peou_tv | -0.053 | 0.072 | -0.270 | -0.730 | 0.466 |
| | inter_peou_ts | -0.014 | 0.068 | -0.076 | -0.212 | 0.832 |

Table 5-1g: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 7 | (Constant) | 0.565 | 0.123 | | 4.605 | 0.000 |
| | Work_Sch_Aut | -0.326 | 0.152 | -0.350 | -2.149 | 0.032 |
| | Des_Mal_Aut | 0.223 | 0.210 | 0.232 | 1.061 | 0.290 |
| | Work_Method_Aut | -0.021 | 0.194 | -0.022 | -0.107 | 0.915 |
| | Task_Var | 0.280 | 0.222 | 0.282 | 1.261 | 0.208 |
| | Task_Sig | 0.246 | 0.235 | 0.262 | 1.046 | 0.296 |
| | Task_Identity | 0.358 | 0.198 | 0.358 | 1.808 | 0.071 |
| | Feedbck_Job | 0.110 | 0.071 | 0.113 | 1.544 | 0.124 |
| | peou | 0.048 | 0.152 | 0.046 | 0.027 | 0.653 |
| | inter_peou_wsa | 0.118 | 0.052 | 0.603 | 2.278 | 0.023 |
| | inter_peou_dma | -0.020 | 0.072 | -0.100 | -0.280 | 0.780 |
| | inter_peou_wma | -0.028 | 0.062 | -0.142 | -0.459 | 0.646 |
| | inter_peou_tv | -0.035 | 0.074 | -0.177 | -0.467 | 0.641 |
| | inter_peou_ts | 0.020 | 0.075 | 0.107 | 0.271 | 0.786 |
| | inter_peou_ti | -0.072 | 0.066 | -0.361 | -1.084 | 0.279 |

Coefficients[a]

Table 5-1h: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 8 | (Constant) | 0.559 | 0.123 | | 4.551 | 0.000 |
| | Work_Sch_Aut | -0.316 | 0.152 | -0.340 | -2.082 | 0.038 |
| | Des_Mal_Aut | 0.217 | 0.210 | 0.225 | 1.031 | 0.303 |
| | Work_Method_Aut | -0.016 | 0.195 | -0.017 | -0.084 | 0.933 |
| | Task_Var | 0.348 | 0.236 | 0.351 | 1.478 | 0.140 |
| | Task_Sig | 0.276 | 0.238 | 0.294 | 1.161 | 0.246 |
| | Task_Identity | 0.426 | 0.213 | 0.426 | 2.000 | 0.046 |
| | Feedbck_Job | -0.063 | 0.213 | -0.064 | -0.296 | 0.767 |
| | peou | 0.025 | 0.075 | 0.023 | 1.125 | 0.242 |
| | inter_peou_wsa | 0.114 | 0.052 | 0.583 | 2.194 | 0.029 |
| | inter_peou_dma | -0.020 | 0.072 | -0.098 | -0.273 | 0.785 |
| | inter_peou_wma | -0.027 | 0.062 | -0.136 | -0.441 | 0.659 |
| | inter_peou_tv | -0.058 | 0.079 | -0.297 | -0.737 | 0.462 |
| | inter_peou_ts | 0.008 | 0.077 | 0.042 | 0.103 | 0.918 |
| | inter_peou_ti | -0.095 | 0.071 | -0.478 | -1.330 | 0.184 |
| | inter_peou_fj | 0.062 | 0.071 | 0.318 | 0.865 | 0.388 |

Coefficients[a]

Table 5-2a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.467 | 0.120 | | 3.880 | 0.000 |
| | Work_Sch_Aut | 0.011 | 0.053 | 0.012 | 0.203 | 0.839 |
| | Des_Mal_Aut | 0.190 | 0.068 | 0.198 | 2.804 | 0.005 |
| | Work_Method_Aut | -0.090 | 0.068 | -0.093 | -1.316 | 0.189 |
| | Task_Var | 0.167 | 0.081 | 0.168 | 2.058 | 0.040 |
| | Task_Sig | 0.286 | 0.079 | 0.305 | 3.606 | 0.000 |
| | Task_Identity | 0.170 | 0.070 | 0.170 | 2.442 | 0.015 |
| | peou | 0.010 | 0.050 | 0.009 | 0.220 | 0.815 |
| | Feedbck_Job | 0.120 | 0.072 | 0.123 | 1.679 | 0.094 |

Table 5-2b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.523 | 0.122 | | 4.303 | 0.000 |
| | Work_Sch_Aut | 0.045 | 0.054 | 0.048 | 0.825 | 0.410 |
| | Des_Mal_Aut | 0.179 | 0.067 | 0.186 | 2.647 | 0.008 |
| | Work_Method_Aut | -0.109 | 0.068 | -0.113 | -1.603 | 0.110 |
| | Task_Var | 0.173 | 0.081 | 0.174 | 2.149 | 0.032 |
| | Task_Sig | 0.313 | 0.079 | 0.333 | 3.937 | 0.000 |
| | Task_Identity | 0.155 | 0.069 | 0.155 | 2.231 | 0.026 |
| | Feedbck_Job | 0.123 | 0.071 | 0.126 | 1.727 | 0.085 |
| | peou | 0.026 | 0.023 | 0.025 | 1.010 | .0215 |
| | inter_peou_wsa | -0.015 | 0.006 | -0.078 | -2.500 | 0.013 |

Table 5-2c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.593 | 0.123 | | 4.835 | 0.000 |
| | Work_Sch_Aut | -0.243 | 0.143 | -0.260 | -1.699 | 0.090 |
| | Des_Mal_Aut | 0.470 | 0.150 | 0.487 | 3.131 | 0.002 |
| | Work_Method_Aut | -0.108 | 0.068 | -0.112 | -1.574 | 0.116 |
| | Task_Var | 0.259 | 0.081 | 0.260 | 3.189 | 0.002 |
| | Task_Sig | 0.291 | 0.080 | 0.309 | 3.628 | 0.000 |
| | Task_Identity | 0.132 | 0.070 | 0.131 | 1.888 | 0.060 |
| | Feedbck_Job | 0.075 | 0.072 | 0.076 | 1.045 | 0.297 |
| | peou | 0.014 | 0.025 | 0.012 | 0.502 | 0.520 |
| | inter_peou_wsa | 0.085 | 0.049 | 0.431 | 1.738 | 0.083 |
| | inter_peou_dma | -0.102 | 0.049 | -0.508 | -2.080 | 0.038 |

Table 5-2d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.597 | 0.123 | | 4.856 | 0.000 |
| | Work_Sch_Aut | -0.272 | 0.150 | -0.291 | -1.813 | 0.071 |
| | Des_Mal_Aut | 0.398 | 0.187 | 0.413 | 2.126 | 0.034 |
| | Work_Method_Aut | -0.004 | 0.175 | -0.004 | -0.023 | 0.981 |
| | Task_Var | 0.259 | 0.081 | 0.260 | 3.183 | 0.002 |
| | Task_Sig | 0.288 | 0.080 | 0.306 | 3.590 | 0.000 |
| | Task_Identity | 0.136 | 0.070 | 0.136 | 1.937 | 0.054 |
| | Feedbck_Job | 0.070 | 0.072 | 0.071 | 0.967 | 0.334 |
| | peou | 0.010 | 0.025 | 0.010 | 0.320 | 0.652 |
| | inter_peou_wsa | 0.095 | 0.051 | 0.482 | 1.850 | 0.065 |
| | inter_peou_dma | -0.077 | 0.063 | -0.383 | -1.228 | 0.220 |
| | inter_peou_wma | -0.035 | 0.055 | -0.175 | -0.643 | 0.520 |

Table 5-2e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.601 | 0.124 | | 4.838 | 0.000 |
| | Work_Sch_Aut | -0.278 | 0.153 | -0.298 | -1.821 | 0.069 |
| | Des_Mal_Aut | 0.379 | 0.206 | 0.393 | 1.843 | 0.066 |
| | Work_Method_Aut | -0.020 | 0.190 | -0.021 | -0.108 | 0.914 |
| | Task_Var | 0.300 | 0.197 | 0.301 | 1.520 | 0.129 |
| | Task_Sig | 0.289 | 0.080 | 0.307 | 3.592 | 0.000 |
| | Task_Identity | 0.136 | 0.070 | 0.135 | 1.932 | 0.054 |
| | Feedbck_Job | 0.069 | 0.072 | 0.070 | 0.956 | 0.340 |
| | peou | -0.003 | 0.054 | -0.013 | -0.056 | 0.956 |
| | inter_peou_wsa | 0.097 | 0.052 | 0.494 | 1.858 | 0.064 |
| | inter_peou_dma | -0.070 | 0.070 | -0.347 | -0.991 | 0.323 |
| | inter_peou_wma | -0.030 | 0.060 | -0.147 | -0.494 | 0.622 |
| | inter_peou_tv | -0.015 | 0.066 | -0.076 | -0.228 | 0.820 |

Table 5-2f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.602 | 0.124 | | 4.846 | 0.000 |
| | Work_Sch_Aut | -0.288 | 0.153 | -0.309 | -1.882 | 0.061 |
| | Des_Mal_Aut | 0.334 | 0.212 | 0.346 | 1.575 | 0.116 |
| | Work_Method_Aut | -0.064 | 0.196 | -0.066 | -0.327 | 0.744 |
| | Task_Var | 0.213 | 0.220 | 0.214 | 0.970 | 0.333 |
| | Task_Sig | 0.471 | 0.220 | 0.501 | 2.142 | 0.033 |
| | Task_Identity | 0.135 | 0.070 | 0.135 | 1.924 | 0.055 |
| | Feedbck_Job | 0.072 | 0.072 | 0.074 | 0.996 | 0.320 |
| | peou | 0.012 | 0.014 | 0.012 | 0.584 | 0.459 |
| | inter_peou_wsa | 0.101 | 0.052 | 0.516 | 1.932 | 0.054 |
| | inter_peou_dma | -0.055 | 0.072 | -0.274 | -0.762 | 0.447 |
| | inter_peou_wma | -0.016 | 0.062 | -0.080 | -0.260 | 0.795 |
| | inter_peou_tv | 0.015 | 0.073 | 0.074 | 0.198 | 0.843 |
| | inter_peou_ts | -0.062 | 0.069 | -0.322 | -0.890 | 0.374 |

Table 5-2g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 7 | (Constant) | 0.602 | 0.124 | | 4.860 | 0.000 |
| | Work_Sch_Aut | -0.305 | 0.153 | -0.326 | -1.989 | 0.047 |
| | Des_Mal_Aut | 0.300 | 0.212 | 0.311 | 1.413 | 0.158 |
| | Work_Method_Aut | -0.101 | 0.196 | -0.104 | -0.512 | 0.609 |
| | Task_Var | 0.137 | 0.224 | 0.138 | 0.612 | 0.541 |
| | Task_Sig | 0.319 | 0.237 | 0.339 | 1.345 | 0.179 |
| | Task_Identity | 0.450 | 0.200 | 0.449 | 2.253 | 0.025 |
| | Feedbck_Job | 0.070 | 0.072 | 0.071 | 0.967 | 0.334 |
| | peou | 0.049 | 0.032 | 0.049 | 0.877 | 0.065 |
| | inter_peou_wsa | 0.106 | 0.052 | 0.538 | 2.020 | 0.044 |
| | inter_peou_dma | -0.046 | 0.072 | -0.227 | -0.631 | 0.529 |
| | inter_peou_wma | 0.000 | 0.062 | -0.003 | -0.010 | 0.992 |
| | inter_peou_tv | 0.043 | 0.075 | 0.219 | 0.573 | 0.567 |
| | inter_peou_ts | -0.007 | 0.076 | -0.036 | -0.089 | 0.929 |
| | inter_peou_ti | -0.112 | 0.067 | -0.564 | -1.683 | 0.093 |

Table 5-2h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 8 | (Constant) | 0.596 | 0.124 | | 4.802 | 0.000 |
| | Work_Sch_Aut | -0.294 | 0.154 | -0.315 | -1.916 | 0.056 |
| | Des_Mal_Aut | 0.293 | 0.212 | 0.304 | 1.380 | 0.168 |
| | Work_Method_Aut | -0.096 | 0.197 | -0.099 | -0.486 | 0.627 |
| | Task_Var | 0.215 | 0.238 | 0.216 | 0.902 | 0.368 |
| | Task_Sig | 0.353 | 0.240 | 0.375 | 1.472 | 0.142 |
| | Task_Identity | 0.527 | 0.215 | 0.526 | 2.450 | 0.015 |
| | Feedbck_Job | -0.126 | 0.215 | -0.128 | -0.585 | 0.559 |
| | peou | 0.07 | 0.027 | 0.06 | 0.198 | 0.742 |
| | inter_peou_wsa | 0.101 | 0.053 | 0.516 | 1.929 | 0.054 |
| | inter_peou_dma | -0.045 | 0.072 | -0.224 | -0.623 | 0.534 |
| | inter_peou_wma | 0.001 | 0.062 | 0.003 | 0.010 | 0.992 |
| | inter_peou_tv | 0.016 | 0.080 | 0.083 | 0.204 | 0.838 |
| | inter_peou_ts | -0.021 | 0.078 | -0.110 | -0.270 | 0.788 |
| | inter_peou_ti | -0.139 | 0.072 | -0.696 | -1.923 | 0.055 |
| | inter_peou_fj | 0.070 | 0.072 | 0.358 | 0.966 | 0.335 |

Table 5-3a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.420 | 0.123 | | 3.407 | 0.001 |
| | Work_Sch_Aut | 0.045 | 0.054 | 0.047 | 0.826 | 0.409 |
| | Des_Mal_Aut | 0.216 | 0.069 | 0.221 | 3.108 | 0.002 |
| | Work_Method_Aut | -0.077 | 0.070 | -0.079 | -1.108 | 0.269 |
| | Task_Var | 0.191 | 0.083 | 0.190 | 2.302 | 0.022 |
| | Task_Sig | 0.226 | 0.081 | 0.237 | 2.779 | 0.006 |
| | Task_Identity | 0.103 | 0.071 | 0.101 | 1.443 | 0.150 |
| | peou | 0.004 | 0.020 | 0.004 | 0.182 | 0.864 |
| | Feedbck_Job | 0.165 | 0.073 | 0.166 | 2.250 | 0.025 |

Table 5-3b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.493 | 0.124 | | 3.981 | 0.000 |
| | Work_Sch_Aut | 0.089 | 0.055 | 0.094 | 1.611 | 0.108 |
| | Des_Mal_Aut | 0.201 | 0.069 | 0.205 | 2.922 | 0.004 |
| | Work_Method_Aut | -0.103 | 0.069 | -0.105 | -1.480 | 0.140 |
| | Task_Var | 0.199 | 0.082 | 0.198 | 2.429 | 0.016 |
| | Task_Sig | 0.260 | 0.081 | 0.273 | 3.220 | 0.001 |
| | Task_Identity | 0.083 | 0.071 | 0.082 | 1.176 | 0.240 |
| | Feedbck_Job | 0.168 | 0.072 | 0.170 | 2.324 | 0.021 |
| | peou | 0.082 | 0.065 | 0.056 | 1.129 | 0.146 |
| | inter_peou_wsa | -0.020 | 0.006 | -0.100 | -3.190 | 0.002 |

Table 5-3c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.512 | 0.124 | | 4.136 | 0.000 |
| | Work_Sch_Aut | -0.175 | 0.144 | -0.185 | -1.215 | 0.225 |
| | Des_Mal_Aut | 0.469 | 0.151 | 0.479 | 3.096 | 0.002 |
| | Work_Method_Aut | -0.103 | 0.069 | -0.105 | -1.491 | 0.137 |
| | Task_Var | 0.210 | 0.082 | 0.209 | 2.567 | 0.011 |
| | Task_Sig | 0.249 | 0.081 | 0.262 | 3.087 | 0.002 |
| | Task_Identity | 0.079 | 0.070 | 0.078 | 1.120 | 0.264 |
| | Feedbck_Job | 0.168 | 0.072 | 0.170 | 2.333 | 0.020 |
| | peou | 0.040 | 0.210 | 0.040 | 0.190 | 0.842 |
| | inter_peou_wsa | 0.077 | 0.049 | 0.385 | 1.562 | 0.119 |
| | inter_peou_dma | -0.098 | 0.049 | -0.482 | -1.984 | 0.048 |

Table 5-3d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.519 | 0.124 | | 4.194 | 0.000 |
| | Work_Sch_Aut | -0.232 | 0.151 | -0.246 | -1.540 | 0.124 |
| | Des_Mal_Aut | 0.326 | 0.188 | 0.333 | 1.728 | 0.085 |
| | Work_Method_Aut | 0.103 | 0.176 | 0.105 | 0.585 | 0.559 |
| | Task_Var | 0.210 | 0.082 | 0.208 | 2.562 | 0.011 |
| | Task_Sig | 0.244 | 0.081 | 0.256 | 3.026 | 0.003 |
| | Task_Identity | 0.087 | 0.071 | 0.086 | 1.231 | 0.219 |
| | Feedbck_Job | 0.158 | 0.073 | 0.159 | 2.181 | 0.030 |
| | peou | 0.030 | 0.025 | 0.029 | 10150 | 0.243 |
| | inter_peou_wsa | 0.097 | 0.052 | 0.486 | 1.877 | 0.061 |
| | inter_peou_dma | -0.048 | 0.063 | -0.238 | -0.766 | 0.444 |
| | inter_peou_wma | -0.070 | 0.055 | -0.344 | -1.270 | 0.205 |

Table 5-3e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.527 | 0.125 | | 4.219 | 0.000 |
| | Work_Sch_Aut | -0.247 | 0.154 | -0.261 | -1.605 | 0.109 |
| | Des_Mal_Aut | 0.283 | 0.207 | 0.290 | 1.368 | 0.172 |
| | Work_Method_Aut | 0.067 | 0.191 | 0.068 | 0.350 | 0.726 |
| | Task_Var | 0.300 | 0.198 | 0.298 | 1.514 | 0.131 |
| | Task_Sig | 0.246 | 0.081 | 0.258 | 3.043 | 0.003 |
| | Task_Identity | 0.087 | 0.071 | 0.085 | 1.224 | 0.222 |
| | Feedbck_Job | 0.157 | 0.073 | 0.158 | 2.157 | 0.032 |
| | peou | 0.012 | 0.028 | 0.012 | 0.452 | 0.621 |
| | inter_peou_wsa | 0.102 | 0.052 | 0.511 | 1.936 | 0.054 |
| | inter_peou_dma | -0.032 | 0.071 | -0.159 | -0.456 | 0.649 |
| | inter_peou_wma | -0.058 | 0.060 | -0.283 | -0.954 | 0.341 |
| | inter_peou_tv | -0.033 | 0.066 | -0.166 | -0.502 | 0.616 |

Table 5-3f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.528 | 0.125 | | 4.228 | 0.000 |
| | Work_Sch_Aut | -0.258 | 0.154 | -0.272 | -1.672 | 0.095 |
| | Des_Mal_Aut | 0.234 | 0.213 | 0.239 | 1.096 | 0.274 |
| | Work_Method_Aut | 0.019 | 0.197 | 0.019 | 0.097 | 0.923 |
| | Task_Var | 0.206 | 0.221 | 0.204 | 0.929 | 0.353 |
| | Task_Sig | 0.446 | 0.221 | 0.468 | 2.016 | 0.045 |
| | Task_Identity | 0.086 | 0.071 | 0.085 | 1.216 | 0.225 |
| | Feedbck_Job | 0.160 | 0.073 | 0.161 | 2.200 | 0.028 |
| | peou | 0.012 | 0.025 | 0.012 | 0.482 | 0.629 |
| | inter_peou_wsa | 0.106 | 0.053 | 0.535 | 2.018 | 0.044 |
| | inter_peou_dma | -0.016 | 0.073 | -0.080 | -0.223 | 0.824 |
| | inter_peou_wma | -0.043 | 0.062 | -0.210 | -0.687 | 0.493 |
| | inter_peou_tv | 0.000 | 0.074 | -0.004 | -0.011 | 0.991 |
| | inter_peou_ts | -0.067 | 0.070 | -0.349 | -0.971 | 0.332 |

Table 5-3g: Impact of Individual Predictors on Dependent Variable

**Coefficients**[a]

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 7 | (Constant) | 0.528 | 0.125 | | 4.228 | 0.000 |
| | Work_Sch_Aut | -0.266 | 0.154 | -0.281 | -1.723 | 0.086 |
| | Des_Mal_Aut | 0.216 | 0.214 | 0.221 | 1.008 | 0.314 |
| | Work_Method_Aut | 0.000 | 0.198 | 0.000 | 0.000 | 1.000 |
| | Task_Var | 0.166 | 0.226 | 0.164 | 0.733 | 0.464 |
| | Task_Sig | 0.367 | 0.239 | 0.385 | 1.531 | 0.127 |
| | Task_Identity | 0.251 | 0.202 | 0.247 | 1.245 | 0.214 |
| | Feedbck_Job | 0.159 | 0.073 | 0.160 | 2.182 | 0.030 |
| | peou | 0.010 | 0.020 | 0.010 | 0.400 | 0.653 |
| | inter_peou_wsa | 0.109 | 0.053 | 0.547 | 2.059 | 0.040 |
| | inter_peou_dma | -0.011 | 0.073 | -0.055 | -0.154 | 0.878 |
| | inter_peou_wma | -0.035 | 0.063 | -0.170 | -0.550 | 0.582 |
| | inter_peou_tv | 0.014 | 0.076 | 0.071 | 0.187 | 0.852 |
| | inter_peou_ts | -0.039 | 0.077 | -0.201 | -0.504 | 0.614 |
| | inter_peou_ti | -0.059 | 0.067 | -0.292 | -0.874 | 0.383 |

Table 5-3h: Impact of Individual Predictors on Dependent Variable

**Coefficients**[a]

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 8 | (Constant) | 0.521 | 0.125 | | 4.168 | 0.000 |
| | Work_Sch_Aut | -0.255 | 0.155 | -0.269 | -1.646 | 0.101 |
| | Des_Mal_Aut | 0.209 | 0.214 | 0.213 | 0.973 | 0.331 |
| | Work_Method_Aut | 0.005 | 0.198 | 0.005 | 0.027 | 0.979 |
| | Task_Var | 0.249 | 0.240 | 0.247 | 1.038 | 0.300 |
| | Task_Sig | 0.403 | 0.242 | 0.423 | 1.665 | 0.097 |
| | Task_Identity | 0.334 | 0.217 | 0.329 | 1.539 | 0.125 |
| | Feedbck_Job | -0.051 | 0.217 | -0.052 | -0.238 | 0.812 |
| | peou | 0.025 | 0.520 | 0.024 | 0.152 | 0.856 |
| | inter_peou_wsa | 0.104 | 0.053 | 0.523 | 1.963 | 0.050 |
| | inter_peou_dma | -0.011 | 0.073 | -0.052 | -0.146 | 0.884 |
| | inter_peou_wma | -0.033 | 0.063 | -0.164 | -0.529 | 0.597 |
| | inter_peou_tv | -0.015 | 0.081 | -0.073 | -0.181 | 0.857 |
| | inter_peou_ts | -0.054 | 0.078 | -0.279 | -0.690 | 0.491 |
| | inter_peou_ti | -0.087 | 0.073 | -0.432 | -1.198 | 0.232 |
| | inter_peou_fj | 0.075 | 0.073 | 0.381 | 1.030 | 0.304 |

Table 5-4a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.446 | 0.121 | | 3.685 | 0.000 |
| | Work_Sch_Aut | 0.009 | 0.053 | 0.010 | 0.170 | 0.865 |
| | Des_Mal_Aut | 0.217 | 0.068 | 0.225 | 3.179 | 0.002 |
| | Work_Method_Aut | -0.110 | 0.068 | -0.114 | -1.605 | 0.109 |
| | Task_Var | 0.295 | 0.082 | 0.297 | 3.620 | 0.000 |
| | Task_Sig | 0.194 | 0.080 | 0.206 | 2.430 | 0.016 |
| | Task_Identity | 0.171 | 0.070 | 0.170 | 2.442 | 0.015 |
| | peou | 0.042 | 0.222 | 0.039 | 0.218 | 0.856 |
| | Feedbck_Job | 0.084 | 0.072 | 0.086 | 1.167 | 0.244 |

Table 5-4b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.519 | 0.122 | | 4.269 | 0.000 |
| | Work_Sch_Aut | 0.053 | 0.054 | 0.057 | 0.980 | 0.328 |
| | Des_Mal_Aut | 0.202 | 0.067 | 0.209 | 2.992 | 0.003 |
| | Work_Method_Aut | -0.135 | 0.068 | -0.140 | -1.986 | 0.048 |
| | Task_Var | 0.303 | 0.081 | 0.305 | 3.766 | 0.000 |
| | Task_Sig | 0.229 | 0.079 | 0.243 | 2.877 | 0.004 |
| | Task_Identity | 0.151 | 0.069 | 0.151 | 2.180 | 0.030 |
| | Feedbck_Job | 0.087 | 0.071 | 0.089 | 1.228 | 0.220 |
| | peou | 0.028 | 0.038 | 0.028 | 1.012 | 0.312 |
| | inter_peou_wsa | -0.020 | 0.006 | -0.101 | -3.241 | 0.001 |

Table 5-4c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.539 | 0.121 | | 4.443 | 0.000 |
| | Work_Sch_Aut | -0.231 | 0.141 | -0.247 | -1.631 | 0.104 |
| | Des_Mal_Aut | 0.490 | 0.148 | 0.507 | 3.297 | 0.001 |
| | Work_Method_Aut | -0.136 | 0.068 | -0.140 | -2.002 | 0.046 |
| | Task_Var | 0.315 | 0.080 | 0.317 | 3.924 | 0.000 |
| | Task_Sig | 0.217 | 0.079 | 0.230 | 2.734 | 0.007 |
| | Task_Identity | 0.147 | 0.069 | 0.146 | 2.124 | 0.034 |
| | Feedbck_Job | 0.087 | 0.071 | 0.089 | 1.234 | 0.218 |
| | peou | 0.060 | 0.075 | 0.059 | 0.853 | 0.308 |
| | inter_peou_wsa | 0.084 | 0.048 | 0.427 | 1.741 | 0.083 |
| | inter_peou_dma | -0.105 | 0.048 | -0.525 | -2.172 | 0.031 |

Table 5-4d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.548 | 0.121 | | 4.523 | 0.000 |
| | Work_Sch_Aut | -0.302 | 0.148 | -0.324 | -2.045 | 0.042 |
| | Des_Mal_Aut | 0.311 | 0.185 | 0.322 | 1.683 | 0.093 |
| | Work_Method_Aut | 0.122 | 0.173 | 0.127 | 0.709 | 0.479 |
| | Task_Var | 0.314 | 0.080 | 0.316 | 3.923 | 0.000 |
| | Task_Sig | 0.210 | 0.079 | 0.224 | 2.660 | 0.008 |
| | Task_Identity | 0.157 | 0.069 | 0.156 | 2.267 | 0.024 |
| | Feedbck_Job | 0.075 | 0.071 | 0.076 | 1.050 | 0.294 |
| | peou | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_peou_wsa | 0.109 | 0.050 | 0.555 | 2.160 | 0.031 |
| | inter_peou_dma | -0.043 | 0.062 | -0.214 | -0.697 | 0.487 |
| | inter_peou_wma | -0.088 | 0.054 | -0.436 | -1.624 | 0.105 |

Table 5-4e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.554 | 0.122 | | 4.532 | 0.000 |
| | Work_Sch_Aut | -0.313 | 0.151 | -0.335 | -2.082 | 0.038 |
| | Des_Mal_Aut | 0.277 | 0.203 | 0.287 | 1.368 | 0.172 |
| | Work_Method_Aut | 0.094 | 0.187 | 0.097 | 0.504 | 0.615 |
| | Task_Var | 0.385 | 0.194 | 0.387 | 1.982 | 0.048 |
| | Task_Sig | 0.212 | 0.079 | 0.225 | 2.673 | 0.008 |
| | Task_Identity | 0.156 | 0.069 | 0.156 | 2.260 | 0.024 |
| | Feedbck_Job | 0.074 | 0.071 | 0.075 | 1.033 | 0.302 |
| | peou | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_peou_wsa | 0.113 | 0.051 | 0.574 | 2.194 | 0.029 |
| | inter_peou_dma | -0.030 | 0.069 | -0.152 | -0.440 | 0.660 |
| | inter_peou_wma | -0.078 | 0.059 | -0.388 | -1.318 | 0.188 |
| | inter_peou_tv | -0.026 | 0.065 | -0.131 | -0.400 | 0.690 |

Table 5-4f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.556 | 0.122 | | 4.545 | 0.000 |
| | Work_Sch_Aut | -0.326 | 0.151 | -0.349 | -2.158 | 0.032 |
| | Des_Mal_Aut | 0.222 | 0.209 | 0.230 | 1.064 | 0.288 |
| | Work_Method_Aut | 0.041 | 0.193 | 0.042 | 0.213 | 0.832 |
| | Task_Var | 0.280 | 0.217 | 0.281 | 1.291 | 0.197 |
| | Task_Sig | 0.434 | 0.217 | 0.462 | 2.005 | 0.046 |
| | Task_Identity | 0.156 | 0.069 | 0.155 | 2.252 | 0.025 |
| | Feedbck_Job | 0.077 | 0.071 | 0.079 | 1.083 | 0.279 |
| | peou | 0.002 | 0.042 | 0.002 | 1.110 | 0.286 |
| | inter_peou_wsa | 0.118 | 0.052 | 0.601 | 2.287 | 0.023 |
| | inter_peou_dma | -0.013 | 0.071 | -0.063 | -0.177 | 0.859 |
| | inter_peou_wma | -0.061 | 0.061 | -0.306 | -1.008 | 0.314 |
| | inter_peou_tv | 0.010 | 0.072 | 0.052 | 0.140 | 0.888 |
| | inter_peou_ts | -0.075 | 0.068 | -0.393 | -1.103 | 0.271 |

Table 5-4g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 7 | (Constant) | 0.556 | 0.122 | | 4.549 | 0.000 |
| | Work_Sch_Aut | -0.338 | 0.151 | -0.361 | -2.235 | 0.026 |
| | Des_Mal_Aut | 0.197 | 0.209 | 0.204 | 0.942 | 0.347 |
| | Work_Method_Aut | 0.014 | 0.194 | 0.015 | 0.073 | 0.942 |
| | Task_Var | 0.223 | 0.221 | 0.225 | 1.011 | 0.313 |
| | Task_Sig | 0.322 | 0.234 | 0.342 | 1.376 | 0.170 |
| | Task_Identity | 0.388 | 0.197 | 0.387 | 1.969 | 0.050 |
| | Feedbck_Job | 0.076 | 0.071 | 0.077 | 1.061 | 0.290 |
| | peou | 0.007 | 0.196 | 0.007 | 0.037 | 0.969 |
| | inter_peou_wsa | 0.121 | 0.052 | 0.618 | 2.350 | 0.019 |
| | inter_peou_dma | -0.006 | 0.071 | -0.028 | -0.079 | 0.937 |
| | inter_peou_wma | -0.050 | 0.062 | -0.249 | -0.813 | 0.417 |
| | inter_peou_tv | 0.031 | 0.074 | 0.158 | 0.421 | 0.674 |
| | inter_peou_ts | -0.035 | 0.075 | -0.182 | -0.462 | 0.645 |
| | inter_peou_ti | -0.083 | 0.066 | -0.416 | -1.258 | 0.209 |

Table 5-4h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 8 | (Constant) | 0.559 | 0.122 | | 4.564 | 0.000 |
| | Work_Sch_Aut | -0.343 | 0.152 | -0.367 | -2.261 | 0.024 |
| | Des_Mal_Aut | 0.201 | 0.210 | 0.208 | 0.956 | 0.340 |
| | Work_Method_Aut | 0.012 | 0.194 | 0.012 | 0.060 | 0.952 |
| | Task_Var | 0.185 | 0.235 | 0.186 | 0.790 | 0.430 |
| | Task_Sig | 0.306 | 0.237 | 0.325 | 1.289 | 0.198 |
| | Task_Identity | 0.350 | 0.213 | 0.349 | 1.648 | 0.100 |
| | Feedbck_Job | 0.172 | 0.212 | 0.175 | 0.808 | 0.419 |
| | peou | 0.030 | 0.019 | 0.030 | 1.128 | 0.369 |
| | inter_peou_wsa | 0.124 | 0.052 | 0.629 | 2.380 | 0.018 |
| | inter_peou_dma | -0.006 | 0.071 | -0.029 | -0.083 | 0.934 |
| | inter_peou_wma | -0.051 | 0.062 | -0.252 | -0.821 | 0.412 |
| | inter_peou_tv | 0.044 | 0.079 | 0.225 | 0.560 | 0.576 |
| | inter_peou_ts | -0.028 | 0.077 | -0.145 | -0.362 | 0.717 |
| | inter_peou_ti | -0.070 | 0.071 | -0.351 | -0.983 | 0.326 |
| | inter_peou_fj | -0.034 | 0.071 | -0.176 | -0.480 | 0.631 |

Table 5-5a: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 0.467 | 0.12 | | 3.88 | 0.000 |
| | Work_Sch_Aut | 0.011 | 0.053 | 0.012 | 0.203 | 0.839 |
| | Des_Mal_Aut | 0.19 | 0.068 | 0.198 | 2.804 | 0.005 |
| | Work_Method_Aut | -0.09 | 0.068 | -0.093 | -1.316 | 0.189 |
| | Task_Var | 0.167 | 0.081 | 0.168 | 2.058 | 0.040 |
| | Task_Sig | 0.286 | 0.079 | 0.305 | 3.606 | 0.000 |
| | Task_Identity | 0.17 | 0.07 | 0.17 | 2.442 | 0.015 |
| | pu | 0.005 | 0.019 | 0.004 | 0.294 | 0.879 |
| | Feedbck_Job | 0.12 | 0.072 | 0.123 | 1.679 | 0.094 |

Coefficients[a]

Table 5-5b: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 2 | (Constant) | 1.657 | 0.148 | | 11.181 | 0.000 |
| | Work_Sch_Aut | -0.471 | 0.063 | -0.506 | -7.528 | 0.000 |
| | Des_Mal_Aut | 0.203 | 0.058 | 0.211 | 3.484 | 0.001 |
| | Work_Method_Aut | -0.111 | 0.059 | -0.115 | -1.887 | 0.060 |
| | Task_Var | 0.028 | 0.071 | 0.028 | 0.395 | 0.693 |
| | Task_Sig | 0.142 | 0.069 | 0.151 | 2.04 | 0.042 |
| | Task_Identity | 0.088 | 0.06 | 0.088 | 1.457 | 0.146 |
| | Feedbck_Job | 0.082 | 0.062 | 0.084 | 1.323 | 0.187 |
| | pu | 0.004 | 0.054 | 0.004 | 0.070 | 0.957 |
| | inter_pu_wsa | 0.145 | 0.013 | 0.932 | 11.226 | 0.000 |

Coefficients[a]

Table 5-5c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.686 | 0.148 | | 11.41 | 0.000 |
| | Work_Sch_Aut | -0.144 | 0.153 | -0.155 | -0.943 | 0.346 |
| | Des_Mal_Aut | -0.177 | 0.172 | -0.184 | -1.029 | 0.304 |
| | Work_Method_Aut | -0.094 | 0.059 | -0.098 | -1.609 | 0.108 |
| | Task_Var | 0.041 | 0.071 | 0.042 | 0.583 | 0.560 |
| | Task_Sig | 0.136 | 0.069 | 0.145 | 1.969 | 0.050 |
| | Task_Identity | 0.079 | 0.06 | 0.079 | 1.31 | 0.191 |
| | Feedbck_Job | 0.083 | 0.061 | 0.085 | 1.349 | 0.178 |
| | pu | 0.006 | 0.070 | 0.005 | 0.089 | 0.945 |
| | inter_pu_wsa | 0.045 | 0.045 | 0.289 | 1.009 | 0.314 |
| | inter_pu_dma | 0.107 | 0.046 | 0.679 | 2.347 | 0.019 |

Table 5-5d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.713 | 0.152 | | 11.263 | 0.000 |
| | Work_Sch_Aut | -0.134 | 0.153 | -0.144 | -0.872 | 0.384 |
| | Des_Mal_Aut | -0.07 | 0.224 | -0.073 | -0.314 | 0.754 |
| | Work_Method_Aut | -0.229 | 0.19 | -0.238 | -1.207 | 0.228 |
| | Task_Var | 0.044 | 0.071 | 0.044 | 0.619 | 0.536 |
| | Task_Sig | 0.139 | 0.069 | 0.148 | 2.009 | 0.045 |
| | Task_Identity | 0.075 | 0.06 | 0.075 | 1.246 | 0.214 |
| | Feedbck_Job | 0.085 | 0.061 | 0.087 | 1.377 | 0.169 |
| | pu | 0.001 | 0.045 | 0.001 | 0.020 | 0.968 |
| | inter_pu_wsa | 0.04 | 0.045 | 0.255 | 0.881 | 0.379 |
| | inter_pu_dma | 0.076 | 0.062 | 0.479 | 1.216 | 0.225 |
| | inter_pu_wma | 0.038 | 0.051 | 0.246 | 0.747 | 0.456 |

Table 5-5e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 1.722 | 0.153 | | 11.251 | 0.000 |
| | Work_Sch_Aut | -0.129 | 0.154 | -0.138 | -0.837 | 0.403 |
| | Des_Mal_Aut | -0.022 | 0.24 | -0.023 | -0.091 | 0.927 |
| | Work_Method_Aut | -0.169 | 0.217 | -0.175 | -0.778 | 0.437 |
| | Task_Var | -0.073 | 0.217 | -0.074 | -0.338 | 0.735 |
| | Task_Sig | 0.135 | 0.07 | 0.144 | 1.948 | 0.052 |
| | Task_Identity | 0.072 | 0.061 | 0.072 | 1.189 | 0.235 |
| | Feedbck_Job | 0.087 | 0.062 | 0.089 | 1.414 | 0.158 |
| | pu | 0.025 | 0.125 | 0.023 | 0.128 | 0.791 |
| | inter_pu_wsa | 0.038 | 0.045 | 0.242 | 0.832 | 0.406 |
| | inter_pu_dma | 0.061 | 0.067 | 0.389 | 0.918 | 0.359 |
| | inter_pu_wma | 0.022 | 0.059 | 0.144 | 0.383 | 0.702 |
| | inter_pu_tv | 0.033 | 0.058 | 0.211 | 0.571 | 0.568 |

Table 5-5f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 1.722 | 0.153 | | 11.24 | 0.000 |
| | Work_Sch_Aut | -0.133 | 0.154 | -0.143 | -0.861 | 0.390 |
| | Des_Mal_Aut | -0.044 | 0.247 | -0.046 | -0.18 | 0.857 |
| | Work_Method_Aut | -0.195 | 0.227 | -0.202 | -0.858 | 0.391 |
| | Task_Var | -0.117 | 0.244 | -0.118 | -0.48 | 0.631 |
| | Task_Sig | 0.237 | 0.266 | 0.253 | 0.892 | 0.373 |
| | Task_Identity | 0.071 | 0.061 | 0.071 | 1.168 | 0.243 |
| | pu | 0.017 | 0.029 | 0.017 | 0.626 | 0.532 |
| | Feedbck_Job | 0.088 | 0.062 | 0.09 | 1.417 | 0.157 |
| | inter_pu_wsa | 0.039 | 0.045 | 0.248 | 0.849 | 0.396 |
| | inter_pu_dma | 0.068 | 0.069 | 0.43 | 0.984 | 0.326 |
| | inter_pu_wma | 0.029 | 0.061 | 0.187 | 0.479 | 0.633 |
| | inter_pu_tv | 0.046 | 0.067 | 0.293 | 0.691 | 0.490 |
| | inter_pu_ts | -0.028 | 0.07 | -0.182 | -0.396 | 0.692 |

Table 5-5g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 7 | (Constant) | 1.753 | 0.156 | | 11.264 | 0.000 |
| | Work_Sch_Aut | -0.106 | 0.156 | -0.114 | -0.68 | 0.497 |
| | Des_Mal_Aut | -0.024 | 0.247 | -0.024 | -0.095 | 0.924 |
| | Work_Method_Aut | -0.175 | 0.228 | -0.182 | -0.769 | 0.443 |
| | Task_Var | -0.082 | 0.246 | -0.083 | -0.334 | 0.739 |
| | Task_Sig | 0.362 | 0.288 | 0.386 | 1.258 | 0.209 |
| | Task_Identity | -0.157 | 0.212 | -0.157 | -0.741 | 0.459 |
| | Feedbck_Job | 0.081 | 0.062 | 0.083 | 1.302 | 0.194 |
| | pu | 0.001 | 0.010 | 0.001 | 1.345 | 0.330 |
| | inter_pu_wsa | 0.032 | 0.046 | 0.207 | 0.703 | 0.482 |
| | inter_pu_dma | 0.062 | 0.069 | 0.393 | 0.898 | 0.370 |
| | inter_pu_wma | 0.023 | 0.061 | 0.146 | 0.371 | 0.711 |
| | inter_pu_tv | 0.034 | 0.068 | 0.218 | 0.509 | 0.611 |
| | inter_pu_ts | -0.063 | 0.077 | -0.41 | -0.818 | 0.414 |
| | inter_pu_ti | 0.065 | 0.058 | 0.417 | 1.123 | 0.262 |

Table 5-5h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 8 | (Constant) | 1.751 | 0.156 | | 11.251 | 0.000 |
| | Work_Sch_Aut | -0.099 | 0.156 | -0.107 | -0.636 | 0.525 |
| | Des_Mal_Aut | -0.032 | 0.247 | -0.034 | -0.13 | 0.896 |
| | Work_Method_Aut | -0.17 | 0.228 | -0.176 | -0.744 | 0.457 |
| | Task_Var | 0.033 | 0.27 | 0.033 | 0.123 | 0.902 |
| | Task_Sig | 0.424 | 0.294 | 0.452 | 1.441 | 0.151 |
| | Task_Identity | -0.092 | 0.221 | -0.092 | -0.414 | 0.679 |
| | Feedbck_Job | -0.159 | 0.241 | -0.163 | -0.661 | 0.509 |
| | pu | 0.010 | 0.092 | 0.009 | 2.568 | 0.564 |
| | inter_pu_wsa | 0.03 | 0.046 | 0.194 | 0.659 | 0.510 |
| | inter_pu_dma | 0.064 | 0.069 | 0.403 | 0.92 | 0.358 |
| | inter_pu_wma | 0.021 | 0.061 | 0.137 | 0.349 | 0.727 |
| | inter_pu_tv | 0.003 | 0.074 | 0.02 | 0.043 | 0.966 |
| | inter_pu_ts | -0.08 | 0.079 | -0.523 | -1.018 | 0.309 |
| | inter_pu_ti | 0.046 | 0.061 | 0.291 | 0.743 | 0.458 |
| | inter_pu_fj | 0.069 | 0.067 | 0.442 | 1.03 | 0.304 |

Table 5-6a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.516 | 0.122 | | 4.240 | 0.000 |
| | Work_Sch_Aut | -0.003 | 0.054 | -0.004 | -0.062 | 0.951 |
| | Des_Mal_Aut | 0.204 | 0.069 | 0.211 | 2.968 | 0.003 |
| | Work_Method_Aut | -0.087 | 0.069 | -0.090 | -1.268 | 0.205 |
| | Task_Var | 0.241 | 0.082 | 0.242 | 2.942 | 0.003 |
| | Task_Sig | 0.275 | 0.080 | 0.292 | 3.426 | 0.001 |
| | Task_Identity | 0.152 | 0.070 | 0.151 | 2.159 | 0.032 |
| | Feedbck_Job | 0.072 | 0.072 | 0.074 | 0.997 | 0.319 |
| | pu | 0.012 | 0.076 | 0.011 | 3.845 | 0.522 |

Table 5-6b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.676 | 0.152 | | 11.049 | 0.000 |
| | Work_Sch_Aut | -0.473 | 0.064 | -0.507 | -7.385 | 0.000 |
| | Des_Mal_Aut | 0.216 | 0.060 | 0.224 | 3.621 | 0.000 |
| | Work_Method_Aut | -0.108 | 0.060 | -0.112 | -1.797 | 0.073 |
| | Task_Var | 0.106 | 0.073 | 0.106 | 1.458 | 0.146 |
| | Task_Sig | 0.134 | 0.071 | 0.142 | 1.886 | 0.060 |
| | Task_Identity | 0.072 | 0.062 | 0.072 | 1.164 | 0.245 |
| | Feedbck_Job | 0.035 | 0.063 | 0.035 | 0.548 | 0.584 |
| | pu | 0.002 | 0.079 | 0.002 | 0.285 | 0.857 |
| | inter_pu_wsa | 0.141 | 0.013 | 0.906 | 10.692 | 0.000 |

Table 5-6c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.708 | 0.151 | | 11.301 | 0.000 |
| | Work_Sch_Aut | -0.118 | 0.156 | -0.127 | -0.757 | 0.449 |
| | Des_Mal_Aut | -0.196 | 0.176 | -0.203 | -1.115 | 0.266 |
| | Work_Method_Aut | -0.090 | 0.060 | -0.093 | -1.504 | 0.134 |
| | Task_Var | 0.120 | 0.072 | 0.121 | 1.663 | 0.097 |
| | Task_Sig | 0.128 | 0.071 | 0.136 | 1.810 | 0.071 |
| | Task_Identity | 0.062 | 0.061 | 0.062 | 1.007 | 0.314 |
| | Feedbck_Job | 0.036 | 0.063 | 0.037 | 0.571 | 0.569 |
| | pu | 0.001 | 0.851 | 0.001 | 0.147 | 0.792 |
| | inter_pu_wsa | 0.033 | 0.046 | 0.210 | 0.721 | 0.471 |
| | inter_pu_dma | 0.116 | 0.047 | 0.734 | 2.489 | 0.013 |

Table 5-6d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.749 | 0.155 | | 11.255 | 0.000 |
| | Work_Sch_Aut | -0.103 | 0.157 | -0.110 | -0.654 | 0.513 |
| | Des_Mal_Aut | -0.032 | 0.229 | -0.033 | -0.140 | 0.888 |
| | Work_Method_Aut | -0.297 | 0.194 | -0.308 | -1.533 | 0.126 |
| | Task_Var | 0.124 | 0.072 | 0.125 | 1.718 | 0.087 |
| | Task_Sig | 0.133 | 0.071 | 0.141 | 1.875 | 0.062 |
| | Task_Identity | 0.056 | 0.062 | 0.056 | 0.916 | 0.361 |
| | Feedbck_Job | 0.039 | 0.063 | 0.039 | 0.614 | 0.539 |
| | pu | 0.009 | 0.523 | 0.008 | 0.049 | 0.979 |
| | inter_pu_wsa | 0.025 | 0.046 | 0.159 | 0.539 | 0.590 |
| | inter_pu_dma | 0.068 | 0.064 | 0.428 | 1.067 | 0.287 |
| | inter_pu_wma | 0.059 | 0.053 | 0.377 | 1.123 | 0.262 |

Table 5-6e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 1.750 | 0.156 | | 11.185 | 0.000 |
| | Work_Sch_Aut | -0.102 | 0.157 | -0.109 | -0.649 | 0.517 |
| | Des_Mal_Aut | -0.027 | 0.245 | -0.028 | -0.112 | 0.911 |
| | Work_Method_Aut | -0.291 | 0.222 | -0.302 | -1.312 | 0.190 |
| | Task_Var | 0.113 | 0.222 | 0.113 | 0.508 | 0.612 |
| | Task_Sig | 0.132 | 0.071 | 0.141 | 1.860 | 0.064 |
| | Task_Identity | 0.056 | 0.062 | 0.056 | 0.906 | 0.366 |
| | Feedbck_Job | 0.039 | 0.063 | 0.040 | 0.616 | 0.538 |
| | pu | 0.027 | 0.082 | 0.027 | 1.489 | 0.501 |
| | inter_pu_wsa | 0.025 | 0.046 | 0.158 | 0.532 | 0.595 |
| | inter_pu_dma | 0.066 | 0.068 | 0.420 | 0.970 | 0.333 |
| | inter_pu_wma | 0.057 | 0.060 | 0.367 | 0.959 | 0.338 |
| | inter_pu_tv | 0.003 | 0.060 | 0.021 | 0.054 | 0.957 |

Table 5-6f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 1.750 | 0.157 | | 11.168 | 0.000 |
| | Work_Sch_Aut | -0.100 | 0.158 | -0.107 | -0.631 | 0.529 |
| | Des_Mal_Aut | -0.014 | 0.252 | -0.014 | -0.054 | 0.957 |
| | Work_Method_Aut | -0.275 | 0.232 | -0.285 | -1.185 | 0.237 |
| | Task_Var | 0.139 | 0.249 | 0.140 | 0.559 | 0.576 |
| | Task_Sig | 0.070 | 0.272 | 0.075 | 0.259 | 0.796 |
| | Task_Identity | 0.057 | 0.062 | 0.057 | 0.915 | 0.361 |
| | Feedbck_Job | 0.039 | 0.063 | 0.039 | 0.612 | 0.541 |
| | pu | 0.032 | 0.549 | 0.030 | 1.256 | 0.240 |
| | inter_pu_wsa | 0.024 | 0.046 | 0.154 | 0.519 | 0.604 |
| | inter_pu_dma | 0.063 | 0.071 | 0.395 | 0.886 | 0.376 |
| | inter_pu_wma | 0.053 | 0.062 | 0.341 | 0.854 | 0.394 |
| | inter_pu_tv | -0.005 | 0.068 | -0.029 | -0.067 | 0.946 |
| | inter_pu_ts | 0.017 | 0.072 | 0.110 | 0.236 | 0.813 |

Table 5-6g: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 7 | (Constant) | 1.793 | 0.159 | | 11.282 | 0.000 |
| | Work_Sch_Aut | -0.063 | 0.159 | -0.067 | -0.393 | 0.695 |
| | Des_Mal_Aut | 0.015 | 0.252 | 0.016 | 0.061 | 0.951 |
| | Work_Method_Aut | -0.248 | 0.233 | -0.257 | -1.065 | 0.287 |
| | Task_Var | 0.188 | 0.251 | 0.189 | 0.750 | 0.454 |
| | Task_Sig | 0.244 | 0.294 | 0.260 | 0.831 | 0.407 |
| | Task_Identity | -0.259 | 0.216 | -0.258 | -1.199 | 0.231 |
| | Feedbck_Job | 0.029 | 0.063 | 0.030 | 0.463 | 0.644 |
| | pu | 0.002 | 0.765 | 0.002 | 1.106 | 0.267 |
| | inter_pu_wsa | 0.015 | 0.047 | 0.098 | 0.327 | 0.744 |
| | inter_pu_dma | 0.054 | 0.071 | 0.344 | 0.771 | 0.441 |
| | inter_pu_wma | 0.044 | 0.063 | 0.283 | 0.708 | 0.479 |
| | inter_pu_tv | -0.021 | 0.069 | -0.133 | -0.303 | 0.762 |
| | inter_pu_ts | -0.032 | 0.079 | -0.206 | -0.403 | 0.687 |
| | inter_pu_ti | 0.091 | 0.059 | 0.577 | 1.525 | 0.128 |

Coefficients[a]

Table 5-6h: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 8 | (Constant) | 1.792 | 0.159 | | 11.262 | 0.000 |
| | Work_Sch_Aut | -0.060 | 0.160 | -0.065 | -0.378 | 0.706 |
| | Des_Mal_Aut | 0.013 | 0.253 | 0.013 | 0.050 | 0.960 |
| | Work_Method_Aut | -0.246 | 0.233 | -0.255 | -1.056 | 0.292 |
| | Task_Var | 0.225 | 0.276 | 0.226 | 0.816 | 0.415 |
| | Task_Sig | 0.264 | 0.301 | 0.281 | 0.879 | 0.380 |
| | Task_Identity | -0.238 | 0.226 | -0.237 | -1.054 | 0.293 |
| | Feedbck_Job | -0.048 | 0.246 | -0.049 | -0.196 | 0.845 |
| | pu | 0.020 | 0.089 | 0.020 | 1.119 | 0.345 |
| | inter_pu_wsa | 0.015 | 0.047 | 0.094 | 0.312 | 0.755 |
| | inter_pu_dma | 0.055 | 0.071 | 0.347 | 0.777 | 0.438 |
| | inter_pu_wma | 0.044 | 0.063 | 0.281 | 0.700 | 0.484 |
| | inter_pu_tv | -0.031 | 0.076 | -0.196 | -0.410 | 0.682 |
| | inter_pu_ts | -0.037 | 0.081 | -0.242 | -0.463 | 0.644 |
| | inter_pu_ti | 0.084 | 0.063 | 0.537 | 1.344 | 0.180 |
| | inter_pu_fj | 0.022 | 0.068 | 0.142 | 0.326 | 0.745 |

Coefficients[a]

Table 5-7a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.420 | 0.123 | | 3.407 | 0.001 |
| | Work_Sch_Aut | 0.045 | 0.054 | 0.047 | 0.826 | 0.409 |
| | Des_Mal_Aut | 0.216 | 0.069 | 0.221 | 3.108 | 0.002 |
| | Work_Method_Aut | -0.077 | 0.070 | -0.079 | -1.108 | 0.269 |
| | Task_Var | 0.191 | 0.083 | 0.190 | 2.302 | 0.022 |
| | Task_Sig | 0.226 | 0.081 | 0.237 | 2.779 | 0.006 |
| | Task_Identity | 0.103 | 0.071 | 0.101 | 1.443 | 0.150 |
| | pu | 0.023 | 0.534 | 0.023 | 1.124 | 0.301 |
| | Feedbck_Job | 0.165 | 0.073 | 0.166 | 2.250 | 0.025 |

Table 5-7b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 1.599 | 0.153 | | 10.425 | 0.000 |
| | Work_Sch_Aut | -0.433 | 0.065 | -0.458 | -6.681 | 0.000 |
| | Des_Mal_Aut | 0.229 | 0.060 | 0.234 | 3.787 | 0.000 |
| | Work_Method_Aut | -0.098 | 0.061 | -0.100 | -1.616 | 0.107 |
| | Task_Var | 0.053 | 0.073 | 0.053 | 0.728 | 0.467 |
| | Task_Sig | 0.083 | 0.072 | 0.087 | 1.150 | 0.251 |
| | Task_Identity | 0.021 | 0.062 | 0.021 | 0.344 | 0.731 |
| | Feedbck_Job | 0.127 | 0.064 | 0.128 | 1.984 | 0.048 |
| | pu | 0.001 | 0.47 | 0.001 | 0.856 | 0.562 |
| | inter_pu_wsa | 0.144 | 0.013 | 0.910 | 10.749 | 0.000 |

Table 5-7c: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 3 | (Constant) | 1.625 | 0.153 | | 10.604 | 0.000 |
| | Work_Sch_Aut | -0.141 | 0.158 | -0.149 | -0.888 | 0.375 |
| | Des_Mal_Aut | -0.111 | 0.179 | -0.114 | -0.622 | 0.534 |
| | Work_Method_Aut | -0.084 | 0.061 | -0.085 | -1.373 | 0.171 |
| | Task_Var | 0.065 | 0.073 | 0.065 | 0.891 | 0.374 |
| | Task_Sig | 0.077 | 0.072 | 0.081 | 1.082 | 0.280 |
| | Task_Identity | 0.013 | 0.062 | 0.013 | 0.213 | 0.832 |
| | Feedbck_Job | 0.128 | 0.064 | 0.129 | 2.008 | 0.045 |
| | pu | 0.002 | 0.59 | 0.002 | 0.912 | 0.517 |
| | inter_pu_wsa | 0.054 | 0.046 | 0.344 | 1.176 | 0.240 |
| | inter_pu_dma | 0.096 | 0.047 | 0.597 | 2.022 | 0.044 |

Coefficients[a]

Table 5-7d: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 4 | (Constant) | 1.641 | 0.158 | | 10.401 | 0.000 |
| | Work_Sch_Aut | -0.134 | 0.159 | -0.142 | -0.845 | 0.399 |
| | Des_Mal_Aut | -0.047 | 0.232 | -0.048 | -0.203 | 0.840 |
| | Work_Method_Aut | -0.164 | 0.197 | -0.168 | -0.834 | 0.405 |
| | Task_Var | 0.067 | 0.073 | 0.066 | 0.910 | 0.363 |
| | Task_Sig | 0.079 | 0.072 | 0.083 | 1.105 | 0.270 |
| | Task_Identity | 0.011 | 0.063 | 0.011 | 0.178 | 0.859 |
| | Feedbck_Job | 0.129 | 0.064 | 0.130 | 2.021 | 0.044 |
| | pu | 0.007 | 0.008 | 0.176 | 0.938 | 0.349 |
| | inter_pu_wsa | 0.051 | 0.047 | 0.324 | 1.094 | 0.275 |
| | inter_pu_dma | 0.077 | 0.065 | 0.479 | 1.191 | 0.235 |
| | inter_pu_wma | 0.023 | 0.053 | 0.145 | 0.431 | 0.667 |

Coefficients[a]

Table 5-7e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 1.643 | 0.159 | | 10.340 | 0.000 |
| | Work_Sch_Aut | -0.134 | 0.160 | -0.141 | -0.837 | 0.403 |
| | Des_Mal_Aut | -0.039 | 0.249 | -0.040 | -0.156 | 0.876 |
| | Work_Method_Aut | -0.154 | 0.226 | -0.157 | -0.683 | 0.495 |
| | Task_Var | 0.047 | 0.225 | 0.047 | 0.208 | 0.835 |
| | Task_Sig | 0.079 | 0.072 | 0.083 | 1.091 | 0.276 |
| | Task_Identity | 0.011 | 0.063 | 0.010 | 0.168 | 0.866 |
| | Feedbck_Job | 0.129 | 0.064 | 0.130 | 2.019 | 0.044 |
| | pu | 0.007 | 0.582 | 0.007 | 0.416 | 0.599 |
| | inter_pu_wsa | 0.051 | 0.047 | 0.322 | 1.082 | 0.280 |
| | inter_pu_dma | 0.074 | 0.070 | 0.464 | 1.071 | 0.285 |
| | inter_pu_wma | 0.020 | 0.061 | 0.128 | 0.333 | 0.739 |
| | inter_pu_tv | 0.006 | 0.061 | 0.035 | 0.093 | 0.926 |

Table 5-7f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 1.644 | 0.159 | | 10.341 | 0.000 |
| | Work_Sch_Aut | -0.143 | 0.160 | -0.151 | -0.892 | 0.373 |
| | Des_Mal_Aut | -0.089 | 0.256 | -0.091 | -0.349 | 0.727 |
| | Work_Method_Aut | -0.212 | 0.236 | -0.217 | -0.899 | 0.369 |
| | Task_Var | -0.050 | 0.253 | -0.050 | -0.199 | 0.843 |
| | Task_Sig | 0.305 | 0.276 | 0.320 | 1.106 | 0.270 |
| | Task_Identity | 0.008 | 0.063 | 0.008 | 0.129 | 0.897 |
| | Feedbck_Job | 0.130 | 0.064 | 0.131 | 2.029 | 0.043 |
| | pu | 0.030 | 0.074 | 0.029 | 0.016 | 0.308 |
| | inter_pu_wsa | 0.053 | 0.047 | 0.334 | 1.121 | 0.263 |
| | inter_pu_dma | 0.089 | 0.072 | 0.554 | 1.240 | 0.216 |
| | inter_pu_wma | 0.035 | 0.063 | 0.223 | 0.558 | 0.577 |
| | inter_pu_tv | 0.034 | 0.069 | 0.214 | 0.494 | 0.621 |
| | inter_pu_ts | -0.062 | 0.073 | -0.398 | -0.850 | 0.396 |

Table 5-7g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 7 | (Constant) | 1.690 | 0.161 | | 10.487 | 0.000 |
| | Work_Sch_Aut | -0.103 | 0.162 | -0.109 | -0.638 | 0.524 |
| | Des_Mal_Aut | -0.058 | 0.256 | -0.059 | -0.227 | 0.821 |
| | Work_Method_Aut | -0.182 | 0.236 | -0.186 | -0.773 | 0.440 |
| | Task_Var | 0.002 | 0.254 | 0.002 | 0.008 | 0.994 |
| | Task_Sig | 0.492 | 0.298 | 0.516 | 1.648 | 0.100 |
| | Task_Identity | -0.331 | 0.219 | -0.326 | -1.511 | 0.132 |
| | Feedbck_Job | 0.120 | 0.064 | 0.121 | 1.868 | 0.063 |
| | pu | 0.004 | 0.853 | 0.004 | 0.135 | 0.886 |
| | inter_pu_wsa | 0.043 | 0.047 | 0.274 | 0.915 | 0.361 |
| | inter_pu_dma | 0.080 | 0.072 | 0.499 | 1.118 | 0.264 |
| | inter_pu_wma | 0.026 | 0.063 | 0.162 | 0.405 | 0.686 |
| | inter_pu_tv | 0.017 | 0.070 | 0.104 | 0.239 | 0.812 |
| | inter_pu_ts | -0.114 | 0.080 | -0.734 | -1.434 | 0.152 |
| | inter_pu_ti | 0.097 | 0.060 | 0.613 | 1.616 | 0.107 |

Table 5-7h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 8 | (Constant) | 1.689 | 0.161 | | 10.468 | 0.000 |
| | Work_Sch_Aut | -0.101 | 0.162 | -0.107 | -0.623 | 0.534 |
| | Des_Mal_Aut | -0.061 | 0.256 | -0.062 | -0.237 | 0.813 |
| | Work_Method_Aut | -0.181 | 0.236 | -0.185 | -0.764 | 0.445 |
| | Task_Var | 0.038 | 0.280 | 0.038 | 0.136 | 0.892 |
| | Task_Sig | 0.511 | 0.305 | 0.536 | 1.675 | 0.095 |
| | Task_Identity | -0.311 | 0.229 | -0.306 | -1.357 | 0.176 |
| | Feedbck_Job | 0.045 | 0.250 | 0.045 | 0.179 | 0.858 |
| | pu | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |
| | inter_pu_wsa | 0.043 | 0.047 | 0.270 | 0.900 | 0.369 |
| | inter_pu_dma | 0.081 | 0.072 | 0.502 | 1.123 | 0.262 |
| | inter_pu_wma | 0.025 | 0.064 | 0.160 | 0.398 | 0.691 |
| | inter_pu_tv | 0.007 | 0.077 | 0.043 | 0.090 | 0.928 |
| | inter_pu_ts | -0.120 | 0.082 | -0.769 | -1.466 | 0.144 |
| | inter_pu_ti | 0.091 | 0.064 | 0.574 | 1.435 | 0.152 |
| | inter_pu_fj | 0.022 | 0.069 | 0.136 | 0.311 | 0.756 |

Table 5-8a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.446 | 0.121 | | 3.685 | 0.000 |
| | Work_Sch_Aut | 0.009 | 0.053 | 0.010 | 0.170 | 0.865 |
| | Des_Mal_Aut | 0.217 | 0.068 | 0.225 | 3.179 | 0.002 |
| | Work_Method_Aut | -0.110 | 0.068 | -0.114 | -1.605 | 0.109 |
| | Task_Var | 0.295 | 0.082 | 0.297 | 3.620 | 0.000 |
| | Task_Sig | 0.194 | 0.080 | 0.206 | 2.430 | 0.016 |
| | Task_Identity | 0.171 | 0.070 | 0.170 | 2.442 | 0.015 |
| | pu | 0.020 | 0.084 | 0.020 | 0.785 | 0.436 |
| | Feedbck_Job | 0.084 | 0.072 | 0.086 | 1.167 | 0.244 |

Table 5-8b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.640 | 0.149 | | 10.997 | 0.000 |
| | Work_Sch_Aut | -0.475 | 0.063 | -0.508 | -7.534 | 0.000 |
| | Des_Mal_Aut | 0.230 | 0.059 | 0.238 | 3.915 | 0.000 |
| | Work_Method_Aut | -0.131 | 0.059 | -0.136 | -2.220 | 0.027 |
| | Task_Var | 0.156 | 0.071 | 0.157 | 2.185 | 0.030 |
| | Task_Sig | 0.049 | 0.070 | 0.052 | 0.701 | 0.484 |
| | Task_Identity | 0.089 | 0.061 | 0.088 | 1.458 | 0.146 |
| | Feedbck_Job | 0.045 | 0.062 | 0.046 | 0.730 | 0.466 |
| | pu | 0.009 | 0.056 | 0.009 | 0.075 | 0.861 |
| | inter_pu_wsa | 0.145 | 0.013 | 0.933 | 11.194 | 0.000 |

Table 5-8c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.667 | 0.149 | | 11.189 | 0.000 |
| | Work_Sch_Aut | -0.179 | 0.154 | -0.191 | -1.160 | 0.247 |
| | Des_Mal_Aut | -0.114 | 0.173 | -0.118 | -0.658 | 0.511 |
| | Work_Method_Aut | -0.116 | 0.059 | -0.120 | -1.967 | 0.050 |
| | Task_Var | 0.168 | 0.071 | 0.169 | 2.357 | 0.019 |
| | Task_Sig | 0.044 | 0.070 | 0.047 | 0.629 | 0.529 |
| | Task_Identity | 0.080 | 0.061 | 0.080 | 1.324 | 0.186 |
| | Feedbck_Job | 0.046 | 0.062 | 0.047 | 0.749 | 0.454 |
| | pu | 0.015 | 0.372 | 0.015 | 0.152 | 0.917 |
| | inter_pu_wsa | 0.055 | 0.045 | 0.352 | 1.225 | 0.221 |
| | inter_pu_dma | 0.097 | 0.046 | 0.612 | 2.107 | 0.036 |

Table 5-8d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.687 | 0.153 | | 11.002 | 0.000 |
| | Work_Sch_Aut | -0.171 | 0.155 | -0.183 | -1.104 | 0.271 |
| | Des_Mal_Aut | -0.033 | 0.226 | -0.034 | -0.144 | 0.886 |
| | Work_Method_Aut | -0.219 | 0.191 | -0.227 | -1.146 | 0.253 |
| | Task_Var | 0.170 | 0.071 | 0.171 | 2.380 | 0.018 |
| | Task_Sig | 0.046 | 0.070 | 0.049 | 0.662 | 0.508 |
| | Task_Identity | 0.077 | 0.061 | 0.077 | 1.274 | 0.203 |
| | Feedbck_Job | 0.048 | 0.062 | 0.049 | 0.770 | 0.442 |
| | pu | 0.018 | 0.250 | 0.018 | 0.184 | 0.873 |
| | inter_pu_wsa | 0.051 | 0.045 | 0.327 | 1.121 | 0.263 |
| | inter_pu_dma | 0.073 | 0.063 | 0.460 | 1.162 | 0.246 |
| | inter_pu_wma | 0.029 | 0.052 | 0.188 | 0.566 | 0.572 |

Table 5-8e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 1.681 | 0.154 | | 10.890 | 0.000 |
| | Work_Sch_Aut | -0.174 | 0.155 | -0.186 | -1.123 | 0.262 |
| | Des_Mal_Aut | -0.066 | 0.242 | -0.068 | -0.272 | 0.786 |
| | Work_Method_Aut | -0.261 | 0.219 | -0.270 | -1.189 | 0.235 |
| | Task_Var | 0.250 | 0.219 | 0.251 | 1.142 | 0.254 |
| | Task_Sig | 0.049 | 0.070 | 0.052 | 0.693 | 0.489 |
| | Task_Identity | 0.080 | 0.061 | 0.079 | 1.302 | 0.194 |
| | Feedbck_Job | 0.046 | 0.062 | 0.047 | 0.738 | 0.461 |
| | pu | 0.025 | 0.081 | 0.025 | 1.129 | 0.286 |
| | inter_pu_wsa | 0.052 | 0.046 | 0.336 | 1.147 | 0.252 |
| | inter_pu_dma | 0.083 | 0.068 | 0.521 | 1.222 | 0.223 |
| | inter_pu_wma | 0.040 | 0.059 | 0.257 | 0.682 | 0.496 |
| | inter_pu_tv | -0.023 | 0.059 | -0.144 | -0.388 | 0.698 |

Table 5-8f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 1.682 | 0.154 | | 10.887 | 0.000 |
| | Work_Sch_Aut | -0.182 | 0.156 | -0.195 | -1.168 | 0.244 |
| | Des_Mal_Aut | -0.107 | 0.249 | -0.111 | -0.431 | 0.667 |
| | Work_Method_Aut | -0.308 | 0.229 | -0.319 | -1.346 | 0.179 |
| | Task_Var | 0.170 | 0.246 | 0.171 | 0.692 | 0.489 |
| | Task_Sig | 0.235 | 0.268 | 0.249 | 0.877 | 0.381 |
| | Task_Identity | 0.078 | 0.061 | 0.077 | 1.266 | 0.206 |
| | Feedbck_Job | 0.046 | 0.062 | 0.047 | 0.747 | 0.456 |
| | pu | 0.000 | 0.047 | 0.001 | 1.154 | 0.313 |
| | inter_pu_wsa | 0.054 | 0.046 | 0.346 | 1.180 | 0.239 |
| | inter_pu_dma | 0.094 | 0.070 | 0.596 | 1.356 | 0.176 |
| | inter_pu_wma | 0.053 | 0.062 | 0.337 | 0.856 | 0.392 |
| | inter_pu_tv | 0.001 | 0.067 | 0.005 | 0.011 | 0.991 |
| | inter_pu_ts | -0.051 | 0.071 | -0.332 | -0.720 | 0.472 |

Table 5-8g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 7 | (Constant) | 1.712 | 0.157 | | 10.910 | 0.000 |
| | Work_Sch_Aut | -0.156 | 0.157 | -0.167 | -0.989 | 0.323 |
| | Des_Mal_Aut | -0.087 | 0.249 | -0.090 | -0.348 | 0.728 |
| | Work_Method_Aut | -0.289 | 0.230 | -0.299 | -1.258 | 0.209 |
| | Task_Var | 0.204 | 0.248 | 0.205 | 0.825 | 0.410 |
| | Task_Sig | 0.357 | 0.290 | 0.380 | 1.231 | 0.219 |
| | Task_Identity | -0.145 | 0.214 | -0.145 | -0.680 | 0.497 |
| | Feedbck_Job | 0.040 | 0.063 | 0.041 | 0.638 | 0.524 |
| | pu | -0.018 | 0.069 | -0.018 | 0.921 | 0.420 |
| | inter_pu_wsa | 0.048 | 0.046 | 0.306 | 1.036 | 0.301 |
| | inter_pu_dma | 0.089 | 0.070 | 0.560 | 1.271 | 0.205 |
| | inter_pu_wma | 0.046 | 0.062 | 0.297 | 0.751 | 0.453 |
| | inter_pu_tv | -0.011 | 0.068 | -0.068 | -0.158 | 0.874 |
| | inter_pu_ts | -0.085 | 0.078 | -0.555 | -1.101 | 0.272 |
| | inter_pu_ti | 0.064 | 0.059 | 0.407 | 1.089 | 0.277 |

Table 5-8h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 8 | (Constant) | 1.711 | 0.157 | | 10.891 | 0.000 |
| | Work_Sch_Aut | -0.153 | 0.158 | -0.164 | -0.972 | 0.332 |
| | Des_Mal_Aut | -0.090 | 0.250 | -0.093 | -0.359 | 0.720 |
| | Work_Method_Aut | -0.287 | 0.230 | -0.297 | -1.248 | 0.213 |
| | Task_Var | 0.243 | 0.272 | 0.244 | 0.893 | 0.372 |
| | Task_Sig | 0.378 | 0.297 | 0.402 | 1.273 | 0.204 |
| | Task_Identity | -0.123 | 0.223 | -0.123 | -0.552 | 0.581 |
| | Feedbck_Job | -0.041 | 0.243 | -0.042 | -0.169 | 0.866 |
| | pu | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | inter_pu_wsa | 0.047 | 0.046 | 0.302 | 1.019 | 0.309 |
| | inter_pu_dma | 0.089 | 0.070 | 0.563 | 1.276 | 0.203 |
| | inter_pu_wma | 0.046 | 0.062 | 0.294 | 0.742 | 0.459 |
| | inter_pu_tv | -0.021 | 0.075 | -0.135 | -0.285 | 0.776 |
| | inter_pu_ts | -0.091 | 0.080 | -0.593 | -1.147 | 0.252 |
| | inter_pu_ti | 0.057 | 0.062 | 0.364 | 0.925 | 0.356 |
| | inter_pu_fj | 0.023 | 0.068 | 0.149 | 0.345 | 0.731 |

Table 5-9a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.467 | 0.120 | | 3.880 | 0.000 |
| | Work_Sch_Aut | 0.011 | 0.053 | 0.012 | 0.203 | 0.839 |
| | Des_Mal_Aut | 0.190 | 0.068 | 0.198 | 2.804 | 0.005 |
| | Work_Method_Aut | -0.090 | 0.068 | -0.093 | -1.316 | 0.189 |
| | Task_Var | 0.167 | 0.081 | 0.168 | 2.058 | 0.040 |
| | Task_Sig | 0.286 | 0.079 | 0.305 | 3.606 | 0.000 |
| | Task_Identity | 0.170 | 0.070 | 0.170 | 2.442 | 0.015 |
| | peou | 0.022 | 0.063 | 0.022 | 0.976 | 0.359 |
| | pu | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | Feedbck_Job | 0.120 | 0.072 | 0.123 | 1.679 | 0.094 |

Table 5-9b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.464 | 0.121 | | 3.830 | 0.000 |
| | Work_Sch_Aut | 0.014 | 0.054 | 0.015 | 0.265 | 0.791 |
| | Des_Mal_Aut | 0.189 | 0.068 | 0.196 | 2.775 | 0.006 |
| | Work_Method_Aut | -0.092 | 0.069 | -0.095 | -1.341 | 0.181 |
| | Task_Var | 0.169 | 0.081 | 0.170 | 2.071 | 0.039 |
| | Task_Sig | 0.290 | 0.081 | 0.309 | 3.605 | 0.000 |
| | Task_Identity | 0.169 | 0.070 | 0.169 | 2.421 | 0.016 |
| | Feedbck_Job | 0.121 | 0.072 | 0.124 | 1.684 | 0.093 |
| | peou | 0.023 | 0.026 | 0.023 | 0.083 | 0.926 |
| | pu | -0.011 | 0.067 | -0.011 | 0.062 | 0.956 |
| | inter_peou_pu_wsa | 0.000 | 0.001 | -0.011 | -0.328 | 0.743 |

Table 5-9c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.471 | 0.121 | | 3.889 | 0.000 |
| | Work_Sch_Aut | -0.100 | 0.111 | -0.107 | -0.900 | 0.369 |
| | Des_Mal_Aut | 0.310 | 0.123 | 0.322 | 2.515 | 0.012 |
| | Work_Method_Aut | -0.098 | 0.069 | -0.101 | -1.422 | 0.156 |
| | Task_Var | 0.170 | 0.081 | 0.172 | 2.093 | 0.037 |
| | Task_Sig | 0.288 | 0.081 | 0.307 | 3.572 | 0.000 |
| | Task_Identity | 0.169 | 0.070 | 0.169 | 2.422 | 0.016 |
| | Feedbck_Job | 0.121 | 0.072 | 0.124 | 1.690 | 0.092 |
| | peou | 0.004 | 0.029 | 0.004 | 0.109 | 0.993 |
| | pu | 0.005 | 0.047 | 0.005 | 0.112 | 0.920 |
| | inter_peou_pu_wsa | 0.012 | 0.011 | 0.296 | 1.126 | 0.261 |
| | inter_peou_pu_dma | -0.013 | 0.011 | -0.307 | -1.178 | 0.239 |

Table 5-9d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.461 | 0.121 | | 3.792 | 0.000 |
| | Work_Sch_Aut | -0.123 | 0.113 | -0.132 | -1.089 | 0.277 |
| | Des_Mal_Aut | 0.215 | 0.152 | 0.223 | 1.418 | 0.157 |
| | Work_Method_Aut | 0.034 | 0.140 | 0.035 | 0.242 | 0.809 |
| | Task_Var | 0.167 | 0.081 | 0.168 | 2.053 | 0.041 |
| | Task_Sig | 0.281 | 0.081 | 0.300 | 3.482 | 0.001 |
| | Task_Identity | 0.177 | 0.070 | 0.177 | 2.528 | 0.012 |
| | Feedbck_Job | 0.112 | 0.072 | 0.115 | 1.554 | 0.121 |
| | peou | 0.015 | 0.020 | 0.015 | 0.568 | 0.539 |
| | pu | 0.017 | 0.029 | 0.017 | 0.626 | 0.532 |
| | inter_peou_pu_wsa | 0.015 | 0.011 | 0.368 | 1.358 | 0.175 |
| | inter_peou_pu_dma | -0.003 | 0.014 | -0.069 | -0.202 | 0.840 |
| | inter_peou_pu_wma | -0.013 | 0.012 | -0.311 | -1.078 | 0.282 |

Table 5-9e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.465 | 0.122 | | 3.819 | 0.000 |
| | Work_Sch_Aut | -0.126 | 0.113 | -0.135 | -1.114 | 0.266 |
| | Des_Mal_Aut | 0.170 | 0.169 | 0.177 | 1.007 | 0.314 |
| | Work_Method_Aut | -0.002 | 0.152 | -0.002 | -0.015 | 0.988 |
| | Task_Var | 0.245 | 0.152 | 0.247 | 1.611 | 0.108 |
| | Task_Sig | 0.286 | 0.081 | 0.305 | 3.521 | 0.000 |
| | Task_Identity | 0.180 | 0.070 | 0.179 | 2.553 | 0.011 |
| | Feedbck_Job | 0.110 | 0.072 | 0.113 | 1.521 | 0.129 |
| | peou | 0.001 | 0.010 | 0.001 | 1.345 | 0.330 |
| | pu | 0.003 | 0.011 | 0.003 | 1.128 | 0.210 |
| | inter_peou_pu_wsa | 0.015 | 0.011 | 0.374 | 1.377 | 0.169 |
| | inter_peou_pu_dma | 0.002 | 0.016 | 0.047 | 0.121 | 0.904 |
| | inter_peou_pu_wma | -0.010 | 0.013 | -0.234 | -0.744 | 0.457 |
| | inter_peou_pu_tv | -0.008 | 0.013 | -0.201 | -0.607 | 0.544 |

Table 5-9f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.477 | 0.122 | | 3.895 | 0.000 |
| | Work_Sch_Aut | -0.139 | 0.114 | -0.149 | -1.218 | 0.224 |
| | Des_Mal_Aut | 0.140 | 0.171 | 0.146 | 0.817 | 0.414 |
| | Work_Method_Aut | -0.032 | 0.155 | -0.033 | -0.207 | 0.836 |
| | Task_Var | 0.161 | 0.174 | 0.162 | 0.920 | 0.358 |
| | Task_Sig | 0.438 | 0.174 | 0.467 | 2.515 | 0.012 |
| | Task_Identity | 0.177 | 0.070 | 0.177 | 2.522 | 0.012 |
| | Feedbck_Job | 0.114 | 0.072 | 0.116 | 1.568 | 0.118 |
| | peou | 0.010 | 0.092 | 0.009 | 2.568 | 0.564 |
| | pu | 0.012 | 0.076 | 0.011 | 3.845 | 0.522 |
| | inter_peou_pu_wsa | 0.017 | 0.011 | 0.404 | 1.480 | 0.140 |
| | inter_peou_pu_dma | 0.005 | 0.017 | 0.109 | 0.274 | 0.784 |
| | inter_peou_pu_wma | -0.008 | 0.013 | -0.181 | -0.565 | 0.572 |
| | inter_peou_pu_tv | 0.000 | 0.016 | 0.011 | 0.029 | 0.977 |
| | inter_peou_pu_ts | -0.015 | 0.015 | -0.368 | -0.987 | 0.324 |

Table 5-9g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 7 | (Constant) | 0.463 | 0.124 | | 3.741 | 0.000 |
| | Work_Sch_Aut | -0.150 | 0.115 | -0.161 | -1.306 | 0.192 |
| | Des_Mal_Aut | 0.133 | 0.172 | 0.138 | 0.774 | 0.439 |
| | Work_Method_Aut | -0.041 | 0.156 | -0.043 | -0.263 | 0.793 |
| | Task_Var | 0.139 | 0.177 | 0.140 | 0.783 | 0.434 |
| | Task_Sig | 0.386 | 0.188 | 0.412 | 2.049 | 0.041 |
| | Task_Identity | 0.278 | 0.157 | 0.278 | 1.778 | 0.076 |
| | Feedbck_Job | 0.117 | 0.073 | 0.119 | 1.606 | 0.109 |
| | peou | 0.002 | 0.079 | 0.002 | 0.285 | 0.857 |
| | pu | 0.003 | 0.85 | 0.003 | 0.279 | 0.726 |
| | inter_peou_pu_wsa | 0.017 | 0.011 | 0.425 | 1.546 | 0.123 |
| | inter_peou_pu_dma | 0.005 | 0.017 | 0.117 | 0.296 | 0.768 |
| | inter_peou_pu_wma | -0.006 | 0.013 | -0.151 | -0.468 | 0.640 |
| | inter_peou_pu_tv | 0.003 | 0.017 | 0.077 | 0.189 | 0.850 |
| | inter_peou_pu_ts | -0.009 | 0.016 | -0.235 | -0.566 | 0.572 |
| | inter_peou_pu_ti | -0.010 | 0.014 | -0.253 | -0.722 | 0.471 |

Table 5-9h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 8 | (Constant) | 0.464 | 0.123 | | 3.761 | 0.000 |
| | Work_Sch_Aut | -0.138 | 0.115 | -0.148 | -1.202 | 0.230 |
| | Des_Mal_Aut | 0.134 | 0.171 | 0.139 | 0.780 | 0.436 |
| | Work_Method_Aut | -0.062 | 0.156 | -0.064 | -0.396 | 0.692 |
| | Task_Var | 0.272 | 0.189 | 0.274 | 1.443 | 0.150 |
| | Task_Sig | 0.444 | 0.190 | 0.473 | 2.337 | 0.020 |
| | Task_Identity | 0.406 | 0.169 | 0.406 | 2.412 | 0.016 |
| | Feedbck_Job | -0.194 | 0.172 | -0.199 | -1.132 | 0.259 |
| | peou | 0.003 | 0.956 | 0.003 | 0.158 | 0.700 |
| | pu | 0.001 | 0.851 | 0.001 | 0.147 | 0.792 |
| | inter_peou_pu_wsa | 0.016 | 0.011 | 0.380 | 1.384 | 0.167 |
| | inter_peou_pu_dma | 0.003 | 0.017 | 0.080 | 0.202 | 0.840 |
| | inter_peou_pu_wma | -0.002 | 0.014 | -0.058 | -0.179 | 0.858 |
| | inter_peou_pu_tv | -0.009 | 0.018 | -0.231 | -0.535 | 0.593 |
| | inter_peou_pu_ts | -0.016 | 0.017 | -0.406 | -0.962 | 0.337 |
| | inter_peou_pu_ti | -0.024 | 0.016 | -0.588 | -1.517 | 0.130 |
| | inter_peou_pu_fj | 0.032 | 0.016 | 0.807 | 1.997 | 0.047 |

Table 5-10a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.516 | 0.122 | | 4.240 | 0.000 |
| | Work_Sch_Aut | -0.003 | 0.054 | -0.004 | -0.062 | 0.951 |
| | Des_Mal_Aut | 0.204 | 0.069 | 0.211 | 2.968 | 0.003 |
| | Work_Method_Aut | -0.087 | 0.069 | -0.090 | -1.268 | 0.205 |
| | Task_Var | 0.241 | 0.082 | 0.242 | 2.942 | 0.003 |
| | Task_Sig | 0.275 | 0.080 | 0.292 | 3.426 | 0.001 |
| | Task_Identity | 0.152 | 0.070 | 0.151 | 2.159 | 0.032 |
| | peou | 0.009 | 0.523 | 0.008 | 0.049 | 0.979 |
| | pu | 0.010 | 0.894 | 0.010 | 0.050 | 0.920 |
| | Feedbck_Job | 0.072 | 0.072 | 0.074 | 0.997 | 0.319 |

Table 5-10b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.512 | 0.122 | | 4.180 | 0.000 |
| | Work_Sch_Aut | 0.001 | 0.055 | 0.001 | 0.025 | 0.980 |
| | Des_Mal_Aut | 0.202 | 0.069 | 0.209 | 2.933 | 0.004 |
| | Work_Method_Aut | -0.090 | 0.069 | -0.094 | -1.304 | 0.193 |
| | Task_Var | 0.243 | 0.082 | 0.245 | 2.958 | 0.003 |
| | Task_Sig | 0.281 | 0.081 | 0.298 | 3.444 | 0.001 |
| | Task_Identity | 0.151 | 0.071 | 0.150 | 2.134 | 0.034 |
| | Feedbck_Job | 0.073 | 0.073 | 0.074 | 1.006 | 0.315 |
| | peou | 0.027 | 0.082 | 0.027 | 1.489 | 0.501 |
| | pu | 0.029 | 0.056 | 0.028 | 1.582 | 0.500 |
| | inter_peou_pu_wsa | 0.000 | 0.001 | -0.015 | -0.424 | 0.672 |

Table 5-10c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.519 | 0.123 | | 4.234 | 0.000 |
| | Work_Sch_Aut | -0.108 | 0.112 | -0.115 | -0.959 | 0.338 |
| | Des_Mal_Aut | 0.318 | 0.125 | 0.329 | 2.547 | 0.011 |
| | Work_Method_Aut | -0.096 | 0.069 | -0.099 | -1.380 | 0.168 |
| | Task_Var | 0.245 | 0.082 | 0.246 | 2.978 | 0.003 |
| | Task_Sig | 0.278 | 0.081 | 0.295 | 3.412 | 0.001 |
| | Task_Identity | 0.150 | 0.071 | 0.150 | 2.134 | 0.034 |
| | Feedbck_Job | 0.073 | 0.073 | 0.075 | 1.011 | 0.313 |
| | peou | 0.030 | 0.792 | 0.029 | 1.250 | 0.253 |
| | pu | 0.032 | 0.549 | 0.030 | 1.256 | 0.240 |
| | inter_peou_pu_wsa | 0.011 | 0.011 | 0.278 | 1.048 | 0.295 |
| | inter_peou_pu_dma | -0.012 | 0.011 | -0.292 | -1.113 | 0.267 |

Table 5-10d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.514 | 0.123 | | 4.181 | 0.000 |
| | Work_Sch_Aut | -0.117 | 0.114 | -0.125 | -1.023 | 0.307 |
| | Des_Mal_Aut | 0.279 | 0.154 | 0.289 | 1.818 | 0.070 |
| | Work_Method_Aut | -0.043 | 0.142 | -0.044 | -0.300 | 0.764 |
| | Task_Var | 0.244 | 0.082 | 0.245 | 2.957 | 0.003 |
| | Task_Sig | 0.275 | 0.082 | 0.293 | 3.366 | 0.001 |
| | Task_Identity | 0.154 | 0.071 | 0.153 | 2.166 | 0.031 |
| | Feedbck_Job | 0.070 | 0.073 | 0.071 | 0.953 | 0.341 |
| | peou | 0.006 | 0.891 | 0.006 | 1.110 | 0.265 |
| | pu | 0.002 | 0.765 | 0.002 | 1.106 | 0.267 |
| | inter_peou_pu_wsa | 0.013 | 0.011 | 0.307 | 1.121 | 0.263 |
| | inter_peou_pu_dma | -0.008 | 0.014 | -0.196 | -0.569 | 0.570 |
| | inter_peou_pu_wma | -0.005 | 0.012 | -0.125 | -0.431 | 0.667 |

Table 5-10e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.517 | 0.123 | | 4.188 | 0.000 |
| | Work_Sch_Aut | -0.119 | 0.115 | -0.127 | -1.035 | 0.302 |
| | Des_Mal_Aut | 0.256 | 0.171 | 0.265 | 1.494 | 0.136 |
| | Work_Method_Aut | -0.061 | 0.154 | -0.064 | -0.398 | 0.691 |
| | Task_Var | 0.285 | 0.154 | 0.286 | 1.847 | 0.066 |
| | Task_Sig | 0.278 | 0.082 | 0.295 | 3.377 | 0.001 |
| | Task_Identity | 0.155 | 0.071 | 0.155 | 2.177 | 0.030 |
| | Feedbck_Job | 0.069 | 0.073 | 0.070 | 0.935 | 0.350 |
| | peou | 0.020 | 0.089 | 0.020 | 1.119 | 0.345 |
| | pu | 0.023 | 0.534 | 0.023 | 1.124 | 0.301 |
| | inter_peou_pu_wsa | 0.013 | 0.011 | 0.310 | 1.130 | 0.259 |
| | inter_peou_pu_dma | -0.006 | 0.017 | -0.135 | -0.342 | 0.732 |
| | inter_peou_pu_wma | -0.004 | 0.013 | -0.086 | -0.269 | 0.788 |
| | inter_peou_pu_tv | -0.004 | 0.014 | -0.105 | -0.314 | 0.754 |

Table 5-10f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.533 | 0.124 | | 4.307 | 0.000 |
| | Work_Sch_Aut | -0.137 | 0.115 | -0.147 | -1.189 | 0.235 |
| | Des_Mal_Aut | 0.212 | 0.173 | 0.220 | 1.224 | 0.222 |
| | Work_Method_Aut | -0.105 | 0.157 | -0.108 | -0.666 | 0.506 |
| | Task_Var | 0.163 | 0.177 | 0.163 | 0.922 | 0.357 |
| | Task_Sig | 0.497 | 0.176 | 0.528 | 2.822 | 0.005 |
| | Task_Identity | 0.152 | 0.071 | 0.152 | 2.136 | 0.033 |
| | Feedbck_Job | 0.074 | 0.073 | 0.075 | 1.006 | 0.315 |
| | peou | 0.001 | 0.47 | 0.001 | 0.856 | 0.562 |
| | pu | 0.002 | 0.59 | 0.002 | 0.912 | 0.517 |
| | inter_peou_pu_wsa | 0.014 | 0.011 | 0.354 | 1.284 | 0.200 |
| | inter_peou_pu_dma | -0.002 | 0.017 | -0.047 | -0.118 | 0.906 |
| | inter_peou_pu_wma | 0.000 | 0.013 | -0.009 | -0.026 | 0.979 |
| | inter_peou_pu_tv | 0.008 | 0.016 | 0.201 | 0.504 | 0.614 |
| | inter_peou_pu_ts | -0.021 | 0.015 | -0.529 | -1.408 | 0.160 |

Table 5-10g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 7 | (Constant) | 0.517 | 0.125 | | 4.127 | 0.000 |
| | Work_Sch_Aut | -0.151 | 0.116 | -0.162 | -1.299 | 0.195 |
| | Des_Mal_Aut | 0.204 | 0.174 | 0.211 | 1.171 | 0.242 |
| | Work_Method_Aut | -0.116 | 0.158 | -0.120 | -0.733 | 0.464 |
| | Task_Var | 0.136 | 0.179 | 0.136 | 0.758 | 0.449 |
| | Task_Sig | 0.433 | 0.191 | 0.460 | 2.273 | 0.024 |
| | Task_Identity | 0.277 | 0.158 | 0.276 | 1.749 | 0.081 |
| | Feedbck_Job | 0.077 | 0.073 | 0.079 | 1.055 | 0.292 |
| | peou | 0.007 | 0.582 | 0.007 | 0.416 | 0.599 |
| | pu | 0.008 | 0.421 | 0.008 | 0.418 | 0.595 |
| | inter_peou_pu_wsa | 0.016 | 0.011 | 0.379 | 1.368 | 0.172 |
| | inter_peou_pu_dma | -0.002 | 0.017 | -0.036 | -0.091 | 0.927 |
| | inter_peou_pu_wma | 0.001 | 0.014 | 0.028 | 0.087 | 0.931 |
| | inter_peou_pu_tv | 0.012 | 0.017 | 0.281 | 0.688 | 0.492 |
| | inter_peou_pu_ts | -0.014 | 0.017 | -0.366 | -0.873 | 0.383 |
| | inter_peou_pu_ti | -0.013 | 0.015 | -0.313 | -0.883 | 0.378 |

Table 5-10h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 8 | (Constant) | 0.517 | 0.125 | | 4.140 | 0.000 |
| | Work_Sch_Aut | -0.141 | 0.116 | -0.151 | -1.211 | 0.227 |
| | Des_Mal_Aut | 0.204 | 0.173 | 0.211 | 1.177 | 0.240 |
| | Work_Method_Aut | -0.133 | 0.158 | -0.138 | -0.845 | 0.399 |
| | Task_Var | 0.250 | 0.191 | 0.251 | 1.306 | 0.192 |
| | Task_Sig | 0.482 | 0.192 | 0.512 | 2.507 | 0.013 |
| | Task_Identity | 0.386 | 0.171 | 0.385 | 2.261 | 0.024 |
| | Feedbck_Job | -0.188 | 0.174 | -0.191 | -1.078 | 0.282 |
| | peou | 0.025 | 0.089 | 0.024 | 1.010 | 0.320 |
| | pu | 0.030 | 0.074 | 0.029 | 0.016 | 0.308 |
| | inter_peou_pu_wsa | 0.014 | 0.011 | 0.341 | 1.230 | 0.220 |
| | inter_peou_pu_dma | -0.003 | 0.017 | -0.068 | -0.171 | 0.865 |
| | inter_peou_pu_wma | 0.004 | 0.014 | 0.107 | 0.327 | 0.744 |
| | inter_peou_pu_tv | 0.001 | 0.018 | 0.019 | 0.045 | 0.964 |
| | inter_peou_pu_ts | -0.020 | 0.017 | -0.511 | -1.198 | 0.232 |
| | inter_peou_pu_ti | -0.024 | 0.016 | -0.597 | -1.525 | 0.128 |
| | inter_peou_pu_fj | 0.028 | 0.016 | 0.686 | 1.680 | 0.094 |

Table 5-11a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.420 | 0.123 | | 3.407 | 0.001 |
| | Work_Sch_Aut | 0.045 | 0.054 | 0.047 | 0.826 | 0.409 |
| | Des_Mal_Aut | 0.216 | 0.069 | 0.221 | 3.108 | 0.002 |
| | Work_Method_Aut | -0.077 | 0.070 | -0.079 | -1.108 | 0.269 |
| | Task_Var | 0.191 | 0.083 | 0.190 | 2.302 | 0.022 |
| | Task_Sig | 0.226 | 0.081 | 0.237 | 2.779 | 0.006 |
| | Task_Identity | 0.103 | 0.071 | 0.101 | 1.443 | 0.150 |
| | peou | 0.002 | 0.712 | 0.002 | 0.130 | 0.899 |
| | pu | 0.004 | 0.853 | 0.004 | 0.135 | 0.886 |
| | Feedbck_Job | 0.165 | 0.073 | 0.166 | 2.250 | 0.025 |

Table 5-11b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.408 | 0.124 | | 3.295 | 0.001 |
| | Work_Sch_Aut | 0.057 | 0.055 | 0.061 | 1.034 | 0.302 |
| | Des_Mal_Aut | 0.211 | 0.070 | 0.216 | 3.035 | 0.003 |
| | Work_Method_Aut | -0.085 | 0.070 | -0.087 | -1.219 | 0.224 |
| | Task_Var | 0.197 | 0.083 | 0.195 | 2.363 | 0.019 |
| | Task_Sig | 0.241 | 0.082 | 0.253 | 2.929 | 0.004 |
| | Task_Identity | 0.099 | 0.071 | 0.098 | 1.390 | 0.165 |
| | Feedbck_Job | 0.167 | 0.073 | 0.168 | 2.276 | 0.023 |
| | peou | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |
| | pu | 0.017 | 0.630 | 0.017 | 0.723 | 0.458 |
| | inter_peou_pu_wsa | -0.002 | 0.001 | -0.038 | -1.114 | 0.266 |

Table 5-11c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.415 | 0.124 | | 3.348 | 0.001 |
| | Work_Sch_Aut | -0.051 | 0.113 | -0.054 | -0.449 | 0.653 |
| | Des_Mal_Aut | 0.326 | 0.126 | 0.333 | 2.586 | 0.010 |
| | Work_Method_Aut | -0.091 | 0.070 | -0.093 | -1.293 | 0.197 |
| | Task_Var | 0.198 | 0.083 | 0.197 | 2.383 | 0.018 |
| | Task_Sig | 0.239 | 0.082 | 0.250 | 2.898 | 0.004 |
| | Task_Identity | 0.099 | 0.071 | 0.098 | 1.389 | 0.166 |
| | Feedbck_Job | 0.167 | 0.073 | 0.169 | 2.281 | 0.023 |
| | peou | 0.015 | 0.025 | 0.014 | 0.721 | 0.462 |
| | pu | 0.020 | 0.084 | 0.020 | 0.785 | 0.436 |
| | inter_peou_pu_wsa | 0.010 | 0.011 | 0.248 | 0.939 | 0.348 |
| | inter_peou_pu_dma | -0.012 | 0.011 | -0.287 | -1.092 | 0.275 |

Table 5-11d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.401 | 0.124 | | 3.235 | 0.001 |
| | Work_Sch_Aut | -0.081 | 0.115 | -0.086 | -0.701 | 0.484 |
| | Des_Mal_Aut | 0.204 | 0.155 | 0.208 | 1.315 | 0.189 |
| | Work_Method_Aut | 0.078 | 0.143 | 0.080 | 0.548 | 0.584 |
| | Task_Var | 0.194 | 0.083 | 0.193 | 2.335 | 0.020 |
| | Task_Sig | 0.230 | 0.082 | 0.242 | 2.791 | 0.006 |
| | Task_Identity | 0.110 | 0.072 | 0.108 | 1.535 | 0.126 |
| | Feedbck_Job | 0.156 | 0.074 | 0.157 | 2.111 | 0.035 |
| | peou | 0.009 | 0.056 | 0.009 | 0.075 | 0.861 |
| | pu | 0.010 | 0.047 | 0.010 | 0.086 | 0.810 |
| | inter_peou_pu_wsa | 0.014 | 0.011 | 0.340 | 1.246 | 0.213 |
| | inter_peou_pu_dma | 0.001 | 0.015 | 0.015 | 0.043 | 0.965 |
| | inter_peou_pu_wma | -0.017 | 0.012 | -0.393 | -1.357 | 0.176 |

Table 5-11e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.407 | 0.124 | | 3.269 | 0.001 |
| | Work_Sch_Aut | -0.085 | 0.116 | -0.089 | -0.731 | 0.465 |
| | Des_Mal_Aut | 0.151 | 0.172 | 0.154 | 0.874 | 0.383 |
| | Work_Method_Aut | 0.036 | 0.156 | 0.037 | 0.230 | 0.818 |
| | Task_Var | 0.286 | 0.155 | 0.284 | 1.842 | 0.066 |
| | Task_Sig | 0.236 | 0.083 | 0.248 | 2.844 | 0.005 |
| | Task_Identity | 0.113 | 0.072 | 0.111 | 1.567 | 0.118 |
| | Feedbck_Job | 0.153 | 0.074 | 0.154 | 2.072 | 0.039 |
| | peou | 0.015 | 0.372 | 0.015 | 0.152 | 0.917 |
| | pu | 0.018 | 0.250 | 0.018 | 0.184 | 0.873 |
| | inter_peou_pu_wsa | 0.014 | 0.011 | 0.347 | 1.270 | 0.205 |
| | inter_peou_pu_dma | 0.006 | 0.017 | 0.150 | 0.381 | 0.704 |
| | inter_peou_pu_wma | -0.013 | 0.013 | -0.304 | -0.962 | 0.337 |
| | inter_peou_pu_tv | -0.010 | 0.014 | -0.233 | -0.701 | 0.484 |

Table 5-11f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.428 | 0.125 | | 3.437 | 0.001 |
| | Work_Sch_Aut | -0.108 | 0.116 | -0.115 | -0.934 | 0.351 |
| | Des_Mal_Aut | 0.095 | 0.175 | 0.097 | 0.542 | 0.588 |
| | Work_Method_Aut | -0.020 | 0.158 | -0.021 | -0.129 | 0.897 |
| | Task_Var | 0.127 | 0.178 | 0.126 | 0.717 | 0.474 |
| | Task_Sig | 0.522 | 0.177 | 0.547 | 2.942 | 0.003 |
| | Task_Identity | 0.109 | 0.072 | 0.107 | 1.516 | 0.130 |
| | Feedbck_Job | 0.160 | 0.074 | 0.161 | 2.168 | 0.031 |
| | peou | 0.030 | 0.046 | 0.030 | 1.134 | 0.256 |
| | pu | 0.025 | 0.081 | 0.025 | 1.129 | 0.286 |
| | inter_peou_pu_wsa | 0.017 | 0.011 | 0.403 | 1.472 | 0.142 |
| | inter_peou_pu_dma | 0.011 | 0.017 | 0.263 | 0.662 | 0.508 |
| | inter_peou_pu_wma | -0.009 | 0.014 | -0.205 | -0.642 | 0.522 |
| | inter_peou_pu_tv | 0.007 | 0.016 | 0.160 | 0.403 | 0.687 |
| | inter_peou_pu_ts | -0.027 | 0.015 | -0.680 | -1.822 | 0.069 |

Table 5-11g: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 7 | (Constant) | 0.422 | 0.126 | | 3.350 | 0.001 |
| | Work_Sch_Aut | -0.113 | 0.117 | -0.120 | -0.965 | 0.335 |
| | Des_Mal_Aut | 0.092 | 0.175 | 0.094 | 0.523 | 0.601 |
| | Work_Method_Aut | -0.024 | 0.159 | -0.025 | -0.152 | 0.879 |
| | Task_Var | 0.118 | 0.180 | 0.117 | 0.655 | 0.513 |
| | Task_Sig | 0.500 | 0.192 | 0.525 | 2.604 | 0.010 |
| | Task_Identity | 0.151 | 0.159 | 0.149 | 0.947 | 0.344 |
| | Feedbck_Job | 0.161 | 0.074 | 0.162 | 2.179 | 0.030 |
| | peou | 0.001 | 0.065 | 0.001 | 1.157 | 0.312 |
| | pu | 0.000 | 0.047 | 0.001 | 1.154 | 0.313 |
| | inter_peou_pu_wsa | 0.017 | 0.011 | 0.412 | 1.493 | 0.136 |
| | inter_peou_pu_dma | 0.011 | 0.017 | 0.267 | 0.670 | 0.503 |
| | inter_peou_pu_wma | -0.008 | 0.014 | -0.193 | -0.597 | 0.551 |
| | inter_peou_pu_tv | 0.008 | 0.017 | 0.187 | 0.459 | 0.646 |
| | inter_peou_pu_ts | -0.025 | 0.017 | -0.626 | -1.502 | 0.134 |
| | inter_peou_pu_ti | -0.004 | 0.015 | -0.105 | -0.298 | 0.766 |

Coefficients[a]

Table 5-11h: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 8 | (Constant) | 0.423 | 0.126 | | 3.363 | 0.001 |
| | Work_Sch_Aut | -0.102 | 0.117 | -0.108 | -0.873 | 0.383 |
| | Des_Mal_Aut | 0.092 | 0.175 | 0.094 | 0.527 | 0.598 |
| | Work_Method_Aut | -0.043 | 0.159 | -0.044 | -0.268 | 0.789 |
| | Task_Var | 0.238 | 0.192 | 0.236 | 1.236 | 0.217 |
| | Task_Sig | 0.551 | 0.194 | 0.579 | 2.847 | 0.005 |
| | Task_Identity | 0.266 | 0.172 | 0.262 | 1.545 | 0.123 |
| | Feedbck_Job | -0.117 | 0.175 | -0.118 | -0.669 | 0.504 |
| | peou | 0.013 | 0.074 | 0.013 | 0.846 | 0.425 |
| | pu | -0.018 | 0.069 | -0.018 | 0.921 | 0.420 |
| | inter_peou_pu_wsa | 0.015 | 0.011 | 0.372 | 1.349 | 0.178 |
| | inter_peou_pu_dma | 0.010 | 0.017 | 0.234 | 0.589 | 0.556 |
| | inter_peou_pu_wma | -0.005 | 0.014 | -0.111 | -0.342 | 0.732 |
| | inter_peou_pu_tv | -0.004 | 0.018 | -0.085 | -0.196 | 0.845 |
| | inter_peou_pu_ts | -0.031 | 0.017 | -0.776 | -1.830 | 0.068 |
| | inter_peou_pu_ti | -0.017 | 0.016 | -0.400 | -1.027 | 0.305 |
| | inter_peou_pu_fj | 0.029 | 0.017 | 0.711 | 1.753 | 0.081 |

Coefficients[a]

Table 5-12a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.446 | 0.121 | | 3.685 | 0.000 |
| | Work_Sch_Aut | 0.009 | 0.053 | 0.010 | 0.170 | 0.865 |
| | Des_Mal_Aut | 0.217 | 0.068 | 0.225 | 3.179 | 0.002 |
| | Work_Method_Aut | -0.110 | 0.068 | -0.114 | -1.605 | 0.109 |
| | Task_Var | 0.295 | 0.082 | 0.297 | 3.620 | 0.000 |
| | Task_Sig | 0.194 | 0.080 | 0.206 | 2.43 | 0.016 |
| | Task_Identity | 0.171 | 0.070 | 0.170 | 2.442 | 0.015 |
| | peou | 0.022 | 0.063 | 0.022 | 0.976 | 0.359 |
| | pu | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | Feedbck_Job | 0.084 | 0.072 | 0.086 | 1.167 | 0.244 |

Table 5-12b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.435 | 0.122 | | 3.577 | 0.000 |
| | Work_Sch_Aut | 0.021 | 0.054 | 0.022 | 0.378 | 0.705 |
| | Des_Mal_Aut | 0.212 | 0.068 | 0.220 | 3.109 | 0.002 |
| | Work_Method_Aut | -0.117 | 0.069 | -0.122 | -1.706 | 0.089 |
| | Task_Var | 0.300 | 0.082 | 0.302 | 3.675 | 0.000 |
| | Task_Sig | 0.208 | 0.081 | 0.221 | 2.574 | 0.010 |
| | Task_Identity | 0.167 | 0.070 | 0.167 | 2.390 | 0.017 |
| | Feedbck_Job | 0.086 | 0.072 | 0.088 | 1.191 | 0.234 |
| | peou | 0.023 | 0.026 | 0.023 | 0.083 | 0.926 |
| | pu | -0.011 | 0.067 | -0.011 | 0.062 | 0.956 |
| | inter_peou_pu_wsa | -0.001 | 0.001 | -0.036 | -1.050 | 0.294 |

Table 5-12c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.443 | 0.122 | | 3.648 | 0.000 |
| | Work_Sch_Aut | -0.113 | 0.111 | -0.121 | -1.013 | 0.312 |
| | Des_Mal_Aut | 0.354 | 0.124 | 0.367 | 2.862 | 0.004 |
| | Work_Method_Aut | -0.124 | 0.069 | -0.128 | -1.801 | 0.073 |
| | Task_Var | 0.302 | 0.082 | 0.304 | 3.704 | 0.000 |
| | Task_Sig | 0.205 | 0.081 | 0.218 | 2.537 | 0.012 |
| | Task_Identity | 0.167 | 0.070 | 0.167 | 2.392 | 0.017 |
| | Feedbck_Job | 0.086 | 0.072 | 0.088 | 1.199 | 0.231 |
| | peou | 0.004 | 0.029 | 0.004 | 0.109 | 0.993 |
| | pu | 0.005 | 0.047 | 0.005 | 0.112 | 0.920 |
| | inter_peou_pu_wsa | 0.013 | 0.011 | 0.322 | 1.224 | 0.222 |
| | inter_peou_pu_dma | -0.015 | 0.011 | -0.358 | -1.372 | 0.171 |

Table 5-12d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.429 | 0.122 | | 3.527 | 0.000 |
| | Work_Sch_Aut | -0.144 | 0.113 | -0.155 | -1.275 | 0.203 |
| | Des_Mal_Aut | 0.225 | 0.152 | 0.233 | 1.482 | 0.139 |
| | Work_Method_Aut | 0.054 | 0.140 | 0.056 | 0.387 | 0.699 |
| | Task_Var | 0.298 | 0.082 | 0.299 | 3.654 | 0.000 |
| | Task_Sig | 0.196 | 0.081 | 0.209 | 2.424 | 0.016 |
| | Task_Identity | 0.179 | 0.070 | 0.178 | 2.545 | 0.011 |
| | Feedbck_Job | 0.074 | 0.072 | 0.076 | 1.023 | 0.307 |
| | peou | 0.015 | 0.020 | 0.015 | 0.568 | 0.539 |
| | pu | 0.017 | 0.029 | 0.017 | 0.626 | 0.532 |
| | inter_peou_pu_wsa | 0.017 | 0.011 | 0.420 | 1.549 | 0.122 |
| | inter_peou_pu_dma | -0.001 | 0.014 | -0.036 | -0.105 | 0.916 |
| | inter_peou_pu_wma | -0.018 | 0.012 | -0.42 | -1.458 | 0.146 |

Table 5-12e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.435 | 0.122 | | 3.565 | 0.000 |
| | Work_Sch_Aut | -0.148 | 0.113 | -0.159 | -1.306 | 0.192 |
| | Des_Mal_Aut | 0.169 | 0.169 | 0.175 | 1.001 | 0.317 |
| | Work_Method_Aut | 0.010 | 0.153 | 0.010 | 0.062 | 0.950 |
| | Task_Var | 0.395 | 0.152 | 0.397 | 2.591 | 0.010 |
| | Task_Sig | 0.202 | 0.081 | 0.215 | 2.484 | 0.013 |
| | Task_Identity | 0.182 | 0.070 | 0.181 | 2.578 | 0.010 |
| | Feedbck_Job | 0.071 | 0.073 | 0.073 | 0.984 | 0.326 |
| | peou | 0.001 | 0.010 | 0.001 | 1.345 | 0.330 |
| | pu | 0.003 | 0.011 | 0.003 | 1.128 | 0.210 |
| | inter_peou_pu_wsa | 0.017 | 0.011 | 0.427 | 1.574 | 0.116 |
| | inter_peou_pu_dma | 0.005 | 0.016 | 0.108 | 0.276 | 0.783 |
| | inter_peou_pu_wma | -0.014 | 0.013 | -0.325 | -1.035 | 0.301 |
| | inter_peou_pu_tv | -0.01 | 0.014 | -0.249 | -0.752 | 0.453 |

Table 5-12f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.457 | 0.122 | | 3.744 | 0.000 |
| | Work_Sch_Aut | -0.173 | 0.114 | -0.185 | -1.521 | 0.129 |
| | Des_Mal_Aut | 0.111 | 0.171 | 0.115 | 0.649 | 0.517 |
| | Work_Method_Aut | -0.049 | 0.155 | -0.051 | -0.315 | 0.753 |
| | Task_Var | 0.230 | 0.174 | 0.231 | 1.321 | 0.187 |
| | Task_Sig | 0.499 | 0.174 | 0.530 | 2.870 | 0.004 |
| | Task_Identity | 0.177 | 0.070 | 0.177 | 2.528 | 0.012 |
| | Feedbck_Job | 0.078 | 0.072 | 0.080 | 1.084 | 0.279 |
| | peou | 0.010 | 0.092 | 0.009 | 2.568 | 0.564 |
| | pu | 0.012 | 0.076 | 0.011 | 3.845 | 0.522 |
| | inter_peou_pu_wsa | 0.020 | 0.011 | 0.486 | 1.788 | 0.075 |
| | inter_peou_pu_dma | 0.010 | 0.017 | 0.227 | 0.576 | 0.565 |
| | inter_peou_pu_wma | -0.009 | 0.013 | -0.221 | -0.696 | 0.487 |
| | inter_peou_pu_tv | 0.007 | 0.016 | 0.165 | 0.419 | 0.676 |
| | inter_peou_pu_ts | -0.028 | 0.015 | -0.715 | -1.930 | 0.054 |

Table 5-12g: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 7 | (Constant) | 0.443 | 0.124 | | 3.586 | 0.000 |
| | Work_Sch_Aut | -0.185 | 0.115 | -0.198 | -1.612 | 0.108 |
| | Des_Mal_Aut | 0.103 | 0.172 | 0.107 | 0.603 | 0.547 |
| | Work_Method_Aut | -0.058 | 0.156 | -0.060 | -0.375 | 0.708 |
| | Task_Var | 0.207 | 0.177 | 0.208 | 1.170 | 0.243 |
| | Task_Sig | 0.444 | 0.188 | 0.472 | 2.360 | 0.019 |
| | Task_Identity | 0.285 | 0.156 | 0.284 | 1.823 | 0.069 |
| | Feedbck_Job | 0.082 | 0.072 | 0.083 | 1.125 | 0.261 |
| | peou | 0.002 | 0.079 | 0.002 | 0.285 | 0.857 |
| | pu | 0.003 | 0.85 | 0.003 | 0.279 | 0.726 |
| | inter_peou_pu_wsa | 0.021 | 0.011 | 0.508 | 1.858 | 0.064 |
| | inter_peou_pu_dma | 0.010 | 0.017 | 0.237 | 0.599 | 0.550 |
| | inter_peou_pu_wma | -0.008 | 0.013 | -0.190 | -0.591 | 0.555 |
| | inter_peou_pu_tv | 0.010 | 0.016 | 0.234 | 0.580 | 0.562 |
| | inter_peou_pu_ts | -0.023 | 0.016 | -0.575 | -1.391 | 0.165 |
| | inter_peou_pu_ti | -0.011 | 0.014 | -0.269 | -0.769 | 0.443 |

Table 5-12h: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 8 | (Constant) | 0.443 | 0.124 | | 3.584 | 0.000 |
| | Work_Sch_Aut | -0.182 | 0.115 | -0.194 | -1.577 | 0.116 |
| | Des_Mal_Aut | 0.104 | 0.172 | 0.107 | 0.604 | 0.546 |
| | Work_Method_Aut | -0.064 | 0.156 | -0.067 | -0.413 | 0.680 |
| | Task_Var | 0.247 | 0.189 | 0.248 | 1.303 | 0.194 |
| | Task_Sig | 0.461 | 0.190 | 0.490 | 2.420 | 0.016 |
| | Task_Identity | 0.323 | 0.169 | 0.322 | 1.909 | 0.057 |
| | Feedbck_Job | -0.011 | 0.172 | -0.011 | -0.063 | 0.950 |
| | peou | 0.003 | 0.956 | 0.003 | 0.158 | 0.700 |
| | pu | 0.001 | 0.851 | 0.001 | 0.147 | 0.792 |
| | inter_peou_pu_wsa | 0.020 | 0.011 | 0.495 | 1.801 | 0.073 |
| | inter_peou_pu_dma | 0.009 | 0.017 | 0.226 | 0.570 | 0.569 |
| | inter_peou_pu_wma | -0.007 | 0.014 | -0.162 | -0.500 | 0.617 |
| | inter_peou_pu_tv | 0.006 | 0.018 | 0.142 | 0.330 | 0.742 |
| | inter_peou_pu_ts | -0.025 | 0.017 | -0.626 | -1.481 | 0.139 |
| | inter_peou_pu_ti | -0.015 | 0.016 | -0.368 | -0.948 | 0.344 |
| | inter_peou_pu_fj | 0.010 | 0.016 | 0.239 | 0.591 | 0.555 |

## APPENDIX G – Knowledge Characteristics and KSB

Table 5-13a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.416 | 0.182 | | 2.283 | 0.023 |
| | Job_Complexity | 0.008 | 0.031 | 0.008 | 0.240 | 0.810 |
| | Info_Proc | 0.094 | 0.084 | 0.098 | 1.118 | 0.264 |
| | Prob_Sol | 0.223 | 0.070 | 0.235 | 3.210 | 0.001 |
| | Skill_Variety | 0.298 | 0.072 | 0.307 | 4.111 | 0.000 |
| | peou | 0.01 | 0.02 | 0.01 | 0.45 | 0.56 |
| | Specialization | 0.241 | 0.087 | 0.247 | 2.758 | 0.006 |

Table 5-13b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.356 | 0.184 | | 1.934 | 0.054 |
| | Job_Complexity | 0.089 | 0.053 | 0.096 | 1.676 | 0.095 |
| | Info_Proc | 0.106 | 0.084 | 0.110 | 1.253 | 0.211 |
| | Prob_Sol | 0.228 | 0.069 | 0.240 | 3.294 | 0.001 |
| | Skill_Variety | 0.291 | 0.072 | 0.300 | 4.024 | 0.000 |
| | Specialization | 0.231 | 0.087 | 0.238 | 2.654 | 0.008 |
| | peou | 0.03 | 0.01 | 0.03 | 0.52 | 0.59 |
| | inter_peou_jc | -0.020 | 0.010 | -0.103 | -1.894 | 0.059 |

Table 5-13c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.311 | 0.184 | | 1.688 | 0.092 |
| | Job_Complexity | 0.016 | 0.062 | 0.017 | 0.255 | 0.799 |
| | Info_Proc | 0.187 | 0.091 | 0.194 | 2.057 | 0.040 |
| | Prob_Sol | 0.203 | 0.070 | 0.214 | 2.918 | 0.004 |
| | Skill_Variety | 0.302 | 0.072 | 0.311 | 4.194 | 0.000 |
| | Specialization | 0.227 | 0.087 | 0.234 | 2.624 | 0.009 |
| | peou | 0.05 | 0.04 | 0.04 | 0.60 | 0.45 |
| | inter_peou_jc | 0.008 | 0.016 | 0.044 | 0.531 | 0.596 |
| | inter_peou_ip | -0.022 | 0.010 | -0.118 | -2.323 | 0.021 |

Table 5-13d: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 4 | (Constant) | 0.312 | 0.187 | | 1.667 | 0.096 |
| | Job_Complexity | 0.016 | 0.062 | 0.017 | 0.256 | 0.798 |
| | Info_Proc | 0.194 | 0.224 | 0.202 | 0.866 | 0.387 |
| | Prob_Sol | 0.196 | 0.224 | 0.206 | 0.873 | 0.383 |
| | Skill_Variety | 0.302 | 0.072 | 0.311 | 4.186 | 0.000 |
| | Specialization | 0.227 | 0.087 | 0.233 | 2.616 | 0.009 |
| | peou | 0.06 | 0.04 | 0.05 | 0.53 | 0.55 |
| | inter_peou_jc | 0.008 | 0.016 | 0.044 | 0.513 | 0.608 |
| | inter_peou_ip | -0.025 | 0.072 | -0.131 | -0.344 | 0.731 |
| | inter_peou_ps | 0.003 | 0.074 | 0.014 | 0.037 | 0.971 |

Coefficients[a]

Table 5-13e: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 5 | (Constant) | 0.310 | 0.188 | | 1.652 | 0.099 |
| | Job_Complexity | 0.018 | 0.063 | 0.020 | 0.289 | 0.773 |
| | Info_Proc | 0.222 | 0.256 | 0.231 | 0.869 | 0.386 |
| | Prob_Sol | 0.213 | 0.237 | 0.224 | 0.899 | 0.369 |
| | Skill_Variety | 0.255 | 0.217 | 0.263 | 1.176 | 0.240 |
| | Specialization | 0.228 | 0.087 | 0.235 | 2.622 | 0.009 |
| | peou | 0.07 | 0.12 | 0.07 | 0.56 | 0.56 |
| | inter_peou_jc | 0.008 | 0.016 | 0.041 | 0.471 | 0.638 |
| | inter_peou_ip | -0.035 | 0.086 | -0.187 | -0.413 | 0.680 |
| | inter_peou_ps | -0.003 | 0.078 | -0.016 | -0.039 | 0.969 |
| | inter_peou_sv | 0.017 | 0.072 | 0.086 | 0.229 | 0.819 |

Table 5-13f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.289 | 0.189 | | 1.533 | 0.126 |
| | Job_Complexity | 0.019 | 0.063 | 0.021 | 0.305 | 0.760 |
| | Info_Proc | 0.322 | 0.274 | 0.334 | 1.174 | 0.241 |
| | Prob_Sol | 0.277 | 0.245 | 0.292 | 1.132 | 0.258 |
| | Skill_Variety | 0.338 | 0.232 | 0.348 | 1.457 | 0.146 |
| | Specialization | -0.012 | 0.253 | -0.013 | -0.048 | 0.961 |
| | peou | 0.02 | 0.01 | 0.02 | 0.58 | 0.53 |
| | inter_peou_jc | 0.009 | 0.016 | 0.045 | 0.520 | 0.604 |
| | inter_peou_ip | -0.071 | 0.093 | -0.373 | -0.763 | 0.446 |
| | inter_peou_ps | -0.026 | 0.082 | -0.131 | -0.314 | 0.754 |
| | inter_peou_sv | -0.011 | 0.077 | -0.059 | -0.147 | 0.883 |
| | inter_peou_spec | 0.085 | 0.084 | 0.432 | 1.011 | 0.313 |

Table 5-14a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.416 | 0.182 | | 2.283 | 0.023 |
| | Job_Complexity | 0.008 | 0.031 | 0.008 | 0.240 | 0.810 |
| | Info_Proc | 0.094 | 0.084 | 0.098 | 1.118 | 0.264 |
| | Prob_Sol | 0.223 | 0.070 | 0.235 | 3.210 | 0.001 |
| | Skill_Variety | 0.298 | 0.072 | 0.307 | 4.111 | 0.000 |
| | Specialization | 0.241 | 0.087 | 0.247 | 2.758 | 0.006 |
| | peou | 0.01 | 0.02 | 0.01 | 0.45 | 0.56 |

Table 5-14b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.356 | 0.184 | | 1.934 | 0.054 |
| | Job_Complexity | 0.089 | 0.053 | 0.096 | 1.676 | 0.095 |
| | Info_Proc | 0.106 | 0.084 | 0.110 | 1.253 | 0.211 |
| | Prob_Sol | 0.228 | 0.069 | 0.240 | 3.294 | 0.001 |
| | Skill_Variety | 0.291 | 0.072 | 0.300 | 4.024 | 0.000 |
| | Specialization | 0.231 | 0.087 | 0.238 | 2.654 | 0.008 |
| | peou | 0.03 | 0.01 | 0.03 | 0.52 | 0.59 |
| | inter_peou_jc | -0.020 | 0.010 | -0.103 | -1.894 | 0.059 |

Table 5-14c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.262 | 0.184 | | 1.419 | 0.157 |
| | Job_Complexity | 0.036 | 0.062 | 0.038 | 0.578 | 0.564 |
| | Info_Proc | 0.192 | 0.091 | 0.198 | 2.110 | 0.036 |
| | Prob_Sol | 0.114 | 0.070 | 0.120 | 1.634 | 0.103 |
| | Skill_Variety | 0.350 | 0.072 | 0.360 | 4.864 | 0.000 |
| | Specialization | 0.279 | 0.087 | 0.285 | 3.216 | 0.001 |
| | peou | 0.020 | 0.027 | 0.020 | 0.684 | 0.353 |
| | inter_peou_jc | 0.008 | 0.016 | 0.041 | 0.489 | 0.625 |
| | inter_peou_ip | -0.024 | 0.010 | -0.125 | -2.483 | 0.014 |

Table 5-14d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.239 | 0.187 | | 1.276 | 0.203 |
| | Job_Complexity | 0.035 | 0.062 | 0.037 | 0.560 | 0.576 |
| | Info_Proc | 0.047 | 0.224 | 0.048 | 0.208 | 0.835 |
| | Prob_Sol | 0.265 | 0.224 | 0.278 | 1.181 | 0.238 |
| | Skill_Variety | 0.348 | 0.072 | 0.358 | 4.827 | 0.000 |
| | Specialization | 0.281 | 0.087 | 0.288 | 3.242 | 0.001 |
| | peou | 0.035 | 0.151 | 0.034 | 0.210 | 0.757 |
| | inter_peou_jc | 0.010 | 0.016 | 0.052 | 0.618 | 0.537 |
| | inter_peou_ip | 0.027 | 0.072 | 0.141 | 0.372 | 0.710 |
| | inter_peou_ps | -0.053 | 0.074 | -0.268 | -0.708 | 0.480 |

Table 5-14e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.235 | 0.188 | | 1.253 | 0.211 |
| | Job_Complexity | 0.039 | 0.063 | 0.042 | 0.623 | 0.534 |
| | Info_Proc | 0.101 | 0.256 | 0.104 | 0.394 | 0.694 |
| | Prob_Sol | 0.297 | 0.236 | 0.312 | 1.258 | 0.209 |
| | Skill_Variety | 0.258 | 0.217 | 0.265 | 1.190 | 0.235 |
| | Specialization | 0.284 | 0.087 | 0.291 | 3.258 | 0.001 |
| | peou | 0.001 | 0.065 | 0.001 | 0.112 | 0.804 |
| | inter_peou_jc | 0.009 | 0.016 | 0.047 | 0.543 | 0.588 |
| | inter_peou_ip | 0.007 | 0.086 | 0.035 | 0.078 | 0.938 |
| | inter_peou_ps | -0.064 | 0.078 | -0.325 | -0.811 | 0.418 |
| | inter_peou_sv | 0.032 | 0.072 | 0.165 | 0.441 | 0.660 |

Table 5-14f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.225 | 0.189 | | 1.189 | 0.235 |
| | Job_Complexity | 0.040 | 0.063 | 0.043 | 0.630 | 0.529 |
| | Info_Proc | 0.151 | 0.274 | 0.156 | 0.550 | 0.583 |
| | Prob_Sol | 0.330 | 0.245 | 0.346 | 1.346 | 0.179 |
| | Skill_Variety | 0.300 | 0.232 | 0.308 | 1.292 | 0.197 |
| | Specialization | 0.163 | 0.254 | 0.167 | 0.641 | 0.522 |
| | peou | 0.010 | 0.050 | 0.009 | 0.220 | 0.815 |
| | inter_peou_jc | 0.009 | 0.016 | 0.049 | 0.566 | 0.572 |
| | inter_peou_ip | -0.011 | 0.093 | -0.058 | -0.119 | 0.905 |
| | inter_peou_ps | -0.075 | 0.082 | -0.383 | -0.918 | 0.359 |
| | inter_peou_sv | 0.018 | 0.077 | 0.092 | 0.229 | 0.819 |
| | inter_peou_spec | 0.043 | 0.084 | 0.216 | 0.508 | 0.612 |

Table 5-15a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.486 | 0.188 | | 2.579 | 0.010 |
| | Job_Complexity | -0.014 | 0.032 | -0.014 | -0.418 | 0.676 |
| | Info_Proc | 0.035 | 0.087 | 0.036 | 0.407 | 0.684 |
| | Prob_Sol | 0.188 | 0.072 | 0.195 | 2.619 | 0.009 |
| | Skill_Variety | 0.324 | 0.075 | 0.329 | 4.329 | 0.000 |
| | peou | 0.026 | 0.023 | 0.025 | 1.010 | .0215 |
| | Specialization | 0.303 | 0.090 | 0.306 | 3.356 | 0.001 |

Table 5-15b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.419 | 0.190 | | 2.200 | 0.028 |
| | Job_Complexity | 0.079 | 0.055 | 0.083 | 1.427 | 0.155 |
| | Info_Proc | 0.048 | 0.087 | 0.049 | 0.553 | 0.580 |
| | Prob_Sol | 0.194 | 0.072 | 0.201 | 2.710 | 0.007 |
| | Skill_Variety | 0.317 | 0.075 | 0.321 | 4.238 | 0.000 |
| | Specialization | 0.292 | 0.090 | 0.296 | 3.246 | 0.001 |
| | peou | 0.051 | 0.002 | 0.050 | 1.502 | 0.102 |
| | inter_peou_jc | -0.022 | 0.011 | -0.114 | -2.065 | 0.040 |

Table 5-15c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.362 | 0.190 | | 1.908 | 0.057 |
| | Job_Complexity | -0.014 | 0.063 | -0.015 | -0.218 | 0.828 |
| | Info_Proc | 0.150 | 0.093 | 0.153 | 1.605 | 0.109 |
| | Prob_Sol | 0.163 | 0.072 | 0.169 | 2.268 | 0.024 |
| | Skill_Variety | 0.331 | 0.074 | 0.335 | 4.459 | 0.000 |
| | Specialization | 0.287 | 0.089 | 0.291 | 3.222 | 0.001 |
| | inter_peou_jc | 0.013 | 0.016 | 0.068 | 0.803 | 0.422 |
| | peou | 0.011 | 0.002 | 0.011 | 0.410 | 0.521 |
| | inter_peou_ip | -0.028 | 0.010 | -0.145 | -2.834 | 0.005 |

Table 5-15d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.344 | 0.193 | | 1.788 | 0.075 |
| | Job_Complexity | -0.015 | 0.064 | -0.016 | -0.230 | 0.818 |
| | Info_Proc | 0.039 | 0.231 | 0.040 | 0.169 | 0.866 |
| | Prob_Sol | 0.278 | 0.231 | 0.288 | 1.206 | 0.229 |
| | Skill_Variety | 0.329 | 0.074 | 0.334 | 4.429 | 0.000 |
| | Specialization | 0.289 | 0.089 | 0.293 | 3.239 | 0.001 |
| | peou | 0.011 | 0.03 | 0.011 | 0.374 | 0.708 |
| | inter_peou_jc | 0.015 | 0.017 | 0.077 | 0.890 | 0.374 |
| | inter_peou_ip | 0.011 | 0.074 | 0.056 | 0.146 | 0.884 |
| | inter_peou_ps | -0.040 | 0.076 | -0.203 | -0.526 | 0.599 |

Table 5-15e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.344 | 0.193 | | 1.781 | 0.076 |
| | Job_Complexity | -0.014 | 0.065 | -0.015 | -0.219 | 0.827 |
| | Info_Proc | 0.045 | 0.263 | 0.046 | 0.172 | 0.863 |
| | Prob_Sol | 0.282 | 0.243 | 0.292 | 1.159 | 0.247 |
| | Skill_Variety | 0.318 | 0.223 | 0.323 | 1.425 | 0.155 |
| | Specialization | 0.290 | 0.090 | 0.293 | 3.232 | 0.001 |
| | peou | 0.001 | 0.052 | 0.001 | 0.432 | 0.976 |
| | inter_peou_jc | 0.015 | 0.017 | 0.076 | 0.870 | 0.385 |
| | inter_peou_ip | 0.008 | 0.088 | 0.044 | 0.096 | 0.924 |
| | inter_peou_ps | -0.042 | 0.081 | -0.209 | -0.514 | 0.607 |
| | inter_peou_sv | 0.004 | 0.074 | 0.019 | 0.051 | 0.959 |

Table 5-15f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.341 | 0.195 | | 1.755 | 0.080 |
| | Job_Complexity | -0.014 | 0.065 | -0.015 | -0.217 | 0.829 |
| | Info_Proc | 0.057 | 0.283 | 0.058 | 0.202 | 0.840 |
| | Prob_Sol | 0.290 | 0.252 | 0.300 | 1.147 | 0.252 |
| | Skill_Variety | 0.328 | 0.239 | 0.333 | 1.372 | 0.171 |
| | Specialization | 0.261 | 0.261 | 0.264 | 1.001 | 0.317 |
| | peou | 0.048 | 0.152 | 0.046 | 0.027 | 0.653 |
| | inter_peou_jc | 0.015 | 0.017 | 0.077 | 0.874 | 0.383 |
| | inter_peou_ip | 0.004 | 0.095 | 0.022 | 0.045 | 0.964 |
| | inter_peou_ps | -0.044 | 0.084 | -0.223 | -0.526 | 0.600 |
| | inter_peou_sv | 0.001 | 0.080 | 0.003 | 0.006 | 0.995 |
| | inter_peou_spec | 0.010 | 0.087 | 0.050 | 0.115 | 0.908 |

Table 5-16a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.504 | 0.184 | | 2.736 | 0.007 |
| | Job_Complexity | -0.012 | 0.032 | -0.013 | -0.371 | 0.711 |
| | Info_Proc | 0.175 | 0.085 | 0.181 | 2.049 | 0.041 |
| | Prob_Sol | 0.146 | 0.070 | 0.153 | 2.075 | 0.039 |
| | Skill_Variety | 0.284 | 0.073 | 0.292 | 3.879 | 0.000 |
| | peou | 0.025 | 0.075 | 0.023 | 1.125 | 0.242 |
| | Specialization | 0.241 | 0.088 | 0.247 | 2.736 | 0.007 |

Table 5-16b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.428 | 0.186 | | 2.308 | 0.022 |
| | Job_Complexity | 0.091 | 0.054 | 0.098 | 1.700 | 0.090 |
| | Info_Proc | 0.189 | 0.085 | 0.196 | 2.224 | 0.027 |
| | Prob_Sol | 0.152 | 0.070 | 0.160 | 2.180 | 0.030 |
| | Skill_Variety | 0.275 | 0.073 | 0.283 | 3.778 | 0.000 |
| | Specialization | 0.229 | 0.088 | 0.235 | 2.612 | 0.009 |
| | peou | 0.020 | 0.026 | 0.020 | 0.701 | 0.418 |
| | inter_peou_jc | -0.025 | 0.010 | -0.129 | -2.368 | 0.018 |

Table 5-16c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.367 | 0.184 | | 1.989 | 0.047 |
| | Job_Complexity | -0.009 | 0.062 | -0.009 | -0.139 | 0.889 |
| | Info_Proc | 0.299 | 0.091 | 0.309 | 3.290 | 0.001 |
| | Prob_Sol | 0.118 | 0.070 | 0.124 | 1.697 | 0.091 |
| | Skill_Variety | 0.290 | 0.072 | 0.298 | 4.026 | 0.000 |
| | Specialization | 0.224 | 0.087 | 0.229 | 2.582 | 0.010 |
| | peou | 0.015 | 0.020 | 0.014 | 0.582 | 0.526 |
| | inter_peou_jc | 0.013 | 0.016 | 0.070 | 0.840 | 0.401 |
| | inter_peou_ip | -0.030 | 0.010 | -0.159 | -3.149 | 0.002 |

Table 5-16d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.334 | 0.187 | | 1.786 | 0.075 |
| | Job_Complexity | -0.010 | 0.062 | -0.011 | -0.164 | 0.870 |
| | Info_Proc | 0.091 | 0.224 | 0.094 | 0.404 | 0.686 |
| | Prob_Sol | 0.335 | 0.224 | 0.351 | 1.494 | 0.136 |
| | Skill_Variety | 0.287 | 0.072 | 0.295 | 3.982 | 0.000 |
| | Specialization | 0.228 | 0.087 | 0.233 | 2.625 | 0.009 |
| | peou | 0.014 | 0.025 | 0.012 | 0.502 | 0.520 |
| | inter_peou_jc | 0.017 | 0.016 | 0.087 | 1.023 | 0.307 |
| | inter_peou_ip | 0.043 | 0.072 | 0.224 | 0.589 | 0.556 |
| | inter_peou_ps | -0.075 | 0.074 | -0.385 | -1.016 | 0.310 |

Table 5-16e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.340 | 0.187 | | 1.814 | 0.071 |
| | Job_Complexity | -0.017 | 0.063 | -0.018 | -0.268 | 0.789 |
| | Info_Proc | 0.010 | 0.256 | 0.010 | 0.038 | 0.970 |
| | Prob_Sol | 0.286 | 0.236 | 0.300 | 1.210 | 0.227 |
| | Skill_Variety | 0.422 | 0.217 | 0.433 | 1.945 | 0.053 |
| | Specialization | 0.225 | 0.087 | 0.230 | 2.582 | 0.010 |
| | peou | 0.010 | 0.025 | 0.010 | 0.320 | 0.652 |
| | inter_peou_jc | 0.018 | 0.016 | 0.095 | 1.110 | 0.268 |
| | inter_peou_ip | 0.073 | 0.086 | 0.383 | 0.849 | 0.396 |
| | inter_peou_ps | -0.059 | 0.078 | -0.301 | -0.752 | 0.453 |
| | inter_peou_sv | -0.047 | 0.072 | -0.246 | -0.658 | 0.511 |

Table 5-16f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 0.333 | 0.189 | | 1.766 | 0.078 |
| | Job_Complexity | -0.016 | 0.063 | -0.018 | -0.262 | 0.793 |
| | Info_Proc | 0.041 | 0.274 | 0.043 | 0.150 | 0.881 |
| | Prob_Sol | 0.306 | 0.245 | 0.321 | 1.250 | 0.212 |
| | Skill_Variety | 0.448 | 0.232 | 0.460 | 1.930 | 0.054 |
| | Specialization | 0.149 | 0.253 | 0.152 | 0.587 | 0.558 |
| | peou | 0.020 | 0.052 | 0.019 | 0.359 | 0.540 |
| | inter_peou_jc | 0.018 | 0.016 | 0.097 | 1.123 | 0.262 |
| | inter_peou_ip | 0.062 | 0.093 | 0.324 | 0.666 | 0.506 |
| | inter_peou_ps | -0.066 | 0.082 | -0.337 | -0.810 | 0.419 |
| | inter_peou_sv | -0.056 | 0.077 | -0.292 | -0.727 | 0.467 |
| | inter_peou_spec | 0.027 | 0.084 | 0.136 | 0.319 | 0.750 |

Table 5-17a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.416 | 0.182 | | 2.283 | 0.023 |
| | Job_Complexity | 0.008 | 0.031 | 0.008 | 0.240 | 0.810 |
| | Info_Proc | 0.094 | 0.084 | 0.098 | 1.118 | 0.264 |
| | Prob_Sol | 0.223 | 0.070 | 0.235 | 3.210 | 0.001 |
| | Skill_Variety | 0.298 | 0.072 | 0.307 | 4.111 | 0.000 |
| | pu | 0.012 | 0.014 | 0.012 | 0.584 | 0.459 |
| | Specialization | 0.241 | 0.087 | 0.247 | 2.758 | 0.006 |

Table 5-17b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 2.043 | 0.256 | | 7.994 | 0.000 |
| | Job_Complexity | -0.524 | 0.069 | -0.565 | -7.544 | 0.000 |
| | Info_Proc | -0.013 | 0.078 | -0.014 | -0.169 | 0.866 |
| | Prob_Sol | 0.137 | 0.064 | 0.144 | 2.127 | 0.034 |
| | Skill_Variety | 0.142 | 0.069 | 0.146 | 2.054 | 0.041 |
| | Specialization | 0.195 | 0.080 | 0.200 | 2.437 | 0.015 |
| | pu | 0.049 | 0.032 | 0.049 | 0.877 | 0.065 |
| | inter_pu_jc | 0.137 | 0.016 | 0.540 | 8.401 | 0.000 |

Table 5-17c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 2.453 | 0.242 | | 10.142 | 0.000 |
| | Job_Complexity | -0.367 | 0.067 | -0.396 | -5.465 | 0.000 |
| | Info_Proc | -0.381 | 0.086 | -0.396 | -4.427 | 0.000 |
| | Prob_Sol | 0.003 | 0.062 | 0.003 | 0.047 | 0.962 |
| | Skill_Variety | 0.123 | 0.064 | 0.127 | 1.933 | 0.054 |
| | Specialization | 0.142 | 0.074 | 0.146 | 1.917 | 0.056 |
| | pu | 0.07 | 0.027 | 0.06 | 0.198 | 0.742 |
| | inter_pu_jc | 0.097 | 0.016 | 0.382 | 6.080 | 0.000 |
| | inter_pu_ip | 0.113 | 0.014 | 0.724 | 7.877 | 0.000 |

Table 5-17d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 2.512 | 0.240 | | 10.462 | 0.000 |
| | Job_Complexity | -0.342 | 0.067 | -0.368 | -5.091 | 0.000 |
| | Info_Proc | 0.220 | 0.221 | 0.229 | 0.995 | 0.321 |
| | Prob_Sol | -0.623 | 0.221 | -0.656 | -2.814 | 0.005 |
| | Skill_Variety | 0.112 | 0.063 | 0.115 | 1.766 | 0.078 |
| | Specialization | 0.126 | 0.074 | 0.130 | 1.715 | 0.087 |
| | pu | 0.004 | 0.020 | 0.004 | 0.182 | 0.864 |
| | inter_pu_jc | 0.089 | 0.016 | 0.352 | 5.602 | 0.000 |
| | inter_pu_ip | -0.066 | 0.063 | -0.424 | -1.059 | 0.290 |
| | inter_pu_ps | 0.188 | 0.064 | 1.238 | 2.942 | 0.003 |

Table 5-17e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 2.523 | 0.240 | | 10.507 | 0.000 |
| | Job_Complexity | -0.338 | 0.067 | -0.365 | -5.041 | 0.000 |
| | Info_Proc | 0.412 | 0.274 | 0.429 | 1.506 | 0.133 |
| | Prob_Sol | -0.530 | 0.234 | -0.558 | -2.262 | 0.024 |
| | Skill_Variety | -0.168 | 0.243 | -0.173 | -0.691 | 0.490 |
| | Specialization | 0.114 | 0.074 | 0.117 | 1.532 | 0.126 |
| | pu | 0.082 | 0.065 | 0.056 | 1.129 | 0.146 |
| | inter_pu_jc | 0.088 | 0.016 | 0.347 | 5.499 | 0.000 |
| | inter_pu_ip | -0.119 | 0.076 | -0.760 | -1.552 | 0.122 |
| | inter_pu_ps | 0.162 | 0.068 | 1.062 | 2.382 | 0.018 |
| | inter_pu_sv | 0.080 | 0.067 | 0.517 | 1.192 | 0.234 |

Table 5-17f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 2.526 | 0.241 | | 10.493 | 0.000 |
| | Job_Complexity | -0.340 | 0.067 | -0.366 | -5.040 | 0.000 |
| | Info_Proc | 0.380 | 0.299 | 0.395 | 1.271 | 0.205 |
| | Prob_Sol | -0.548 | 0.244 | -0.577 | -2.248 | 0.025 |
| | Skill_Variety | -0.190 | 0.257 | -0.196 | -0.741 | 0.459 |
| | Specialization | 0.186 | 0.275 | 0.191 | 0.674 | 0.501 |
| | pu | 0.040 | 0.210 | 0.040 | 0.190 | 0.842 |
| | inter_pu_jc | 0.088 | 0.016 | 0.347 | 5.496 | 0.000 |
| | inter_pu_ip | -0.109 | 0.084 | -0.701 | -1.308 | 0.192 |
| | inter_pu_ps | 0.167 | 0.070 | 1.095 | 2.366 | 0.019 |
| | inter_pu_sv | 0.087 | 0.072 | 0.563 | 1.208 | 0.228 |
| | inter_pu_spec | -0.021 | 0.078 | -0.136 | -0.270 | 0.787 |

Table 5-18a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.378 | 0.183 | | 2.067 | 0.039 |
| | Job_Complexity | 0.022 | 0.031 | 0.023 | 0.690 | 0.490 |
| | Info_Proc | 0.092 | 0.085 | 0.095 | 1.089 | 0.277 |
| | Prob_Sol | 0.135 | 0.070 | 0.141 | 1.933 | 0.054 |
| | Skill_Variety | 0.346 | 0.073 | 0.356 | 4.766 | 0.000 |
| | pu | 0.030 | 0.025 | 0.029 | 10150 | 0.243 |
| | Specialization | 0.294 | 0.088 | 0.301 | 3.354 | 0.001 |

Table 5-18b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.812 | 0.262 | | 6.916 | 0.000 |
| | Job_Complexity | -0.447 | 0.071 | -0.481 | -6.275 | 0.000 |
| | Info_Proc | -0.003 | 0.080 | -0.003 | -0.033 | 0.974 |
| | Prob_Sol | 0.059 | 0.066 | 0.062 | 0.891 | 0.373 |
| | Skill_Variety | 0.209 | 0.071 | 0.214 | 2.953 | 0.003 |
| | Specialization | 0.253 | 0.082 | 0.260 | 3.087 | 0.002 |
| | pu | 0.012 | 0.028 | 0.012 | 0.452 | 0.621 |
| | inter_pu_jc | 0.121 | 0.017 | 0.475 | 7.224 | 0.000 |

Table 5-18c: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 3 | (Constant) | 2.229 | 0.248 | | 8.986 | 0.000 |
| | Job_Complexity | -0.287 | 0.069 | -0.309 | -4.161 | 0.000 |
| | Info_Proc | -0.378 | 0.088 | -0.391 | -4.278 | 0.000 |
| | Prob_Sol | -0.078 | 0.064 | -0.082 | -1.227 | 0.221 |
| | Skill_Variety | 0.190 | 0.065 | 0.195 | 2.905 | 0.004 |
| | Specialization | 0.200 | 0.076 | 0.205 | 2.619 | 0.009 |
| | pu | 0.012 | 0.025 | 0.012 | 0.482 | 0.629 |
| | inter_pu_jc | 0.080 | 0.016 | 0.313 | 4.881 | 0.000 |
| | inter_pu_ip | 0.115 | 0.015 | 0.737 | 7.831 | 0.000 |

Coefficients[a]

Table 5-18d: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 4 | (Constant) | 2.285 | 0.247 | | 9.258 | 0.000 |
| | Job_Complexity | -0.263 | 0.069 | -0.283 | -3.810 | 0.000 |
| | Info_Proc | 0.185 | 0.228 | 0.192 | 0.815 | 0.416 |
| | Prob_Sol | -0.664 | 0.228 | -0.697 | -2.919 | 0.004 |
| | Skill_Variety | 0.179 | 0.065 | 0.184 | 2.757 | 0.006 |
| | Specialization | 0.185 | 0.076 | 0.189 | 2.437 | 0.015 |
| | pu | 0.010 | 0.020 | 0.010 | 0.400 | 0.653 |
| | inter_pu_jc | 0.073 | 0.016 | 0.286 | 4.437 | 0.000 |
| | inter_pu_ip | -0.053 | 0.064 | -0.336 | -0.819 | 0.413 |
| | inter_pu_ps | 0.177 | 0.066 | 1.156 | 2.681 | 0.008 |

Coefficients[a]

Table 5-18e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 2.289 | 0.247 | | 9.256 | 0.000 |
| | Job_Complexity | -0.262 | 0.069 | -0.281 | -3.786 | 0.000 |
| | Info_Proc | 0.252 | 0.282 | 0.261 | 0.895 | 0.372 |
| | Prob_Sol | -0.632 | 0.241 | -0.664 | -2.618 | 0.009 |
| | Skill_Variety | 0.082 | 0.250 | 0.084 | 0.328 | 0.743 |
| | Specialization | 0.180 | 0.077 | 0.185 | 2.353 | 0.019 |
| | pu | 0.025 | 0.520 | 0.024 | 0.152 | 0.856 |
| | inter_pu_jc | 0.072 | 0.016 | 0.284 | 4.389 | 0.000 |
| | inter_pu_ip | -0.071 | 0.079 | -0.453 | -0.900 | 0.369 |
| | inter_pu_ps | 0.167 | 0.070 | 1.095 | 2.393 | 0.017 |
| | inter_pu_sv | 0.028 | 0.070 | 0.179 | 0.402 | 0.688 |

Table 5-18f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 2.279 | 0.248 | | 9.200 | 0.000 |
| | Job_Complexity | -0.257 | 0.069 | -0.277 | -3.710 | 0.000 |
| | Info_Proc | 0.348 | 0.308 | 0.360 | 1.130 | 0.259 |
| | Prob_Sol | -0.580 | 0.251 | -0.608 | -2.310 | 0.021 |
| | Skill_Variety | 0.148 | 0.264 | 0.152 | 0.560 | 0.576 |
| | Specialization | -0.032 | 0.283 | -0.032 | -0.111 | 0.911 |
| | pu | 0.042 | 0.222 | 0.039 | 0.218 | 0.856 |
| | inter_pu_jc | 0.072 | 0.016 | 0.283 | 4.371 | 0.000 |
| | inter_pu_ip | -0.098 | 0.086 | -0.626 | -1.137 | 0.256 |
| | inter_pu_ps | 0.152 | 0.072 | 0.998 | 2.103 | 0.036 |
| | inter_pu_sv | 0.007 | 0.075 | 0.046 | 0.096 | 0.924 |
| | inter_pu_spec | 0.062 | 0.080 | 0.402 | 0.777 | 0.438 |

Table 5-19a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.486 | 0.188 | | 2.579 | 0.010 |
| | Job_Complexity | -0.014 | 0.032 | -0.014 | -0.418 | 0.676 |
| | Info_Proc | 0.035 | 0.087 | 0.036 | 0.407 | 0.684 |
| | Prob_Sol | 0.188 | 0.072 | 0.195 | 2.619 | 0.009 |
| | Skill_Variety | 0.324 | 0.075 | 0.329 | 4.329 | 0.000 |
| | pu | 0.028 | 0.038 | 0.028 | 1.012 | 0.312 |
| | Specialization | 0.303 | 0.090 | 0.306 | 3.356 | 0.001 |

Table 5-19b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.890 | 0.272 | | 6.947 | 0.000 |
| | Job_Complexity | -0.472 | 0.074 | -0.502 | -6.386 | 0.000 |
| | Info_Proc | -0.057 | 0.083 | -0.059 | -0.688 | 0.492 |
| | Prob_Sol | 0.114 | 0.069 | 0.118 | 1.661 | 0.098 |
| | Skill_Variety | 0.189 | 0.073 | 0.192 | 2.583 | 0.010 |
| | Specialization | 0.264 | 0.085 | 0.267 | 3.091 | 0.002 |
| | pu | 0.060 | 0.075 | 0.059 | 0.853 | 0.308 |
| | inter_pu_jc | 0.118 | 0.017 | 0.459 | 6.810 | 0.000 |

Table 5-19c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 2.311 | 0.259 | | 8.924 | 0.000 |
| | Job_Complexity | -0.311 | 0.072 | -0.331 | -4.324 | 0.000 |
| | Info_Proc | -0.435 | 0.092 | -0.445 | -4.722 | 0.000 |
| | Prob_Sol | -0.024 | 0.066 | -0.025 | -0.361 | 0.719 |
| | Skill_Variety | 0.171 | 0.068 | 0.173 | 2.501 | 0.013 |
| | Specialization | 0.209 | 0.080 | 0.212 | 2.632 | 0.009 |
| | pu | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_pu_jc | 0.077 | 0.017 | 0.299 | 4.511 | 0.000 |
| | inter_pu_ip | 0.116 | 0.015 | 0.733 | 7.559 | 0.000 |

Table 5-19d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 2.373 | 0.257 | | 9.228 | 0.000 |
| | Job_Complexity | -0.284 | 0.072 | -0.302 | -3.952 | 0.000 |
| | Info_Proc | 0.198 | 0.237 | 0.203 | 0.836 | 0.404 |
| | Prob_Sol | -0.683 | 0.237 | -0.708 | -2.882 | 0.004 |
| | Skill_Variety | 0.158 | 0.068 | 0.161 | 2.341 | 0.020 |
| | Specialization | 0.193 | 0.079 | 0.195 | 2.438 | 0.015 |
| | pu | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_pu_jc | 0.069 | 0.017 | 0.268 | 4.042 | 0.000 |
| | inter_pu_ip | -0.073 | 0.067 | -0.459 | -1.086 | 0.278 |
| | inter_pu_ps | 0.199 | 0.069 | 1.284 | 2.894 | 0.004 |

Table 5-19e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 2.381 | 0.258 | | 9.245 | 0.000 |
| | Job_Complexity | -0.282 | 0.072 | -0.299 | -3.915 | 0.000 |
| | Info_Proc | 0.330 | 0.294 | 0.338 | 1.125 | 0.261 |
| | Prob_Sol | -0.620 | 0.251 | -0.642 | -2.465 | 0.014 |
| | Skill_Variety | -0.034 | 0.260 | -0.034 | -0.129 | 0.897 |
| | Specialization | 0.184 | 0.080 | 0.186 | 2.305 | 0.022 |
| | pu | 0.002 | 0.042 | 0.002 | 1.110 | 0.286 |
| | inter_pu_jc | 0.068 | 0.017 | 0.264 | 3.970 | 0.000 |
| | inter_pu_ip | -0.109 | 0.082 | -0.686 | -1.327 | 0.185 |
| | inter_pu_ps | 0.180 | 0.073 | 1.165 | 2.476 | 0.014 |
| | inter_pu_sv | 0.055 | 0.072 | 0.350 | 0.764 | 0.446 |

Table 5-19f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 6 | (Constant) | 2.376 | 0.258 | | 9.202 | 0.000 |
| | Job_Complexity | -0.279 | 0.072 | -0.297 | -3.866 | 0.000 |
| | Info_Proc | 0.382 | 0.321 | 0.391 | 1.192 | 0.234 |
| | Prob_Sol | -0.591 | 0.261 | -0.613 | -2.262 | 0.024 |
| | Skill_Variety | 0.002 | 0.275 | 0.002 | 0.008 | 0.994 |
| | Specialization | 0.069 | 0.295 | 0.070 | 0.234 | 0.815 |
| | pu | 0.007 | 0.196 | 0.007 | 0.037 | 0.969 |
| | inter_pu_jc | 0.068 | 0.017 | 0.264 | 3.957 | 0.000 |
| | inter_pu_ip | -0.123 | 0.090 | -0.779 | -1.375 | 0.170 |
| | inter_pu_ps | 0.172 | 0.076 | 1.113 | 2.279 | 0.023 |
| | inter_pu_sv | 0.044 | 0.078 | 0.279 | 0.567 | 0.571 |
| | inter_pu_spec | 0.034 | 0.084 | 0.215 | 0.404 | 0.686 |

Table 5-20a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.504 | 0.184 | | 2.736 | 0.007 |
| | Job_Complexity | -0.012 | 0.032 | -0.013 | -0.371 | 0.711 |
| | Info_Proc | 0.175 | 0.085 | 0.181 | 2.049 | 0.041 |
| | Prob_Sol | 0.146 | 0.070 | 0.153 | 2.075 | 0.039 |
| | Skill_Variety | 0.284 | 0.073 | 0.292 | 3.879 | 0.000 |
| | pu | 0.030 | 0.019 | 0.030 | 1.128 | 0.369 |
| | Specialization | 0.241 | 0.088 | 0.247 | 2.736 | 0.007 |

Table 5-20b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 1.916 | 0.265 | | 7.239 | 0.000 |
| | Job_Complexity | -0.473 | 0.072 | -0.509 | -6.578 | 0.000 |
| | Info_Proc | 0.081 | 0.081 | 0.084 | 1.002 | 0.317 |
| | Prob_Sol | 0.071 | 0.067 | 0.074 | 1.063 | 0.288 |
| | Skill_Variety | 0.148 | 0.071 | 0.152 | 2.076 | 0.039 |
| | Specialization | 0.202 | 0.083 | 0.207 | 2.431 | 0.016 |
| | pu | 0.005 | 0.019 | 0.004 | 0.294 | 0.879 |
| | inter_pu_jc | 0.119 | 0.017 | 0.468 | 7.043 | 0.000 |

Table 5-20c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 2.334 | 0.251 | | 9.301 | 0.000 |
| | Job_Complexity | -0.313 | 0.070 | -0.337 | -4.487 | 0.000 |
| | Info_Proc | -0.295 | 0.089 | -0.305 | -3.299 | 0.001 |
| | Prob_Sol | -0.066 | 0.064 | -0.069 | -1.029 | 0.304 |
| | Skill_Variety | 0.129 | 0.066 | 0.133 | 1.956 | 0.051 |
| | Specialization | 0.148 | 0.077 | 0.151 | 1.916 | 0.056 |
| | pu | 0.004 | 0.054 | 0.004 | 0.070 | 0.957 |
| | inter_pu_jc | 0.078 | 0.017 | 0.306 | 4.710 | 0.000 |
| | inter_pu_ip | 0.115 | 0.015 | 0.738 | 7.756 | 0.000 |

Table 5-20d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 2.391 | 0.250 | | 9.574 | 0.000 |
| | Job_Complexity | -0.289 | 0.070 | -0.310 | -4.136 | 0.000 |
| | Info_Proc | 0.275 | 0.230 | 0.285 | 1.196 | 0.232 |
| | Prob_Sol | -0.660 | 0.230 | -0.692 | -2.865 | 0.004 |
| | Skill_Variety | 0.118 | 0.066 | 0.122 | 1.802 | 0.072 |
| | Specialization | 0.133 | 0.077 | 0.136 | 1.729 | 0.085 |
| | pu | 0.006 | 0.070 | 0.005 | 0.089 | 0.945 |
| | inter_pu_jc | 0.071 | 0.017 | 0.278 | 4.267 | 0.000 |
| | inter_pu_ip | -0.054 | 0.065 | -0.348 | -0.837 | 0.403 |
| | inter_pu_ps | 0.179 | 0.067 | 1.170 | 2.682 | 0.008 |

Table 5-20e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 2.401 | 0.250 | | 9.607 | 0.000 |
| | Job_Complexity | -0.286 | 0.070 | -0.307 | -4.091 | 0.000 |
| | Info_Proc | 0.447 | 0.285 | 0.463 | 1.569 | 0.117 |
| | Prob_Sol | -0.577 | 0.244 | -0.606 | -2.365 | 0.019 |
| | Skill_Variety | -0.131 | 0.253 | -0.135 | -0.519 | 0.604 |
| | Specialization | 0.121 | 0.077 | 0.124 | 1.568 | 0.118 |
| | pu | 0.001 | 0.045 | 0.001 | 0.020 | 0.968 |
| | inter_pu_jc | 0.070 | 0.017 | 0.273 | 4.177 | 0.000 |
| | inter_pu_ip | -0.101 | 0.079 | -0.647 | -1.273 | 0.204 |
| | inter_pu_ps | 0.155 | 0.071 | 1.014 | 2.192 | 0.029 |
| | inter_pu_sv | 0.072 | 0.070 | 0.461 | 1.023 | 0.307 |

Table 5-20f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 2.390 | 0.250 | | 9.548 | 0.000 |
| | Job_Complexity | -0.281 | 0.070 | -0.302 | -4.007 | 0.000 |
| | Info_Proc | 0.554 | 0.311 | 0.574 | 1.783 | 0.075 |
| | Prob_Sol | -0.518 | 0.253 | -0.544 | -2.043 | 0.042 |
| | Skill_Variety | -0.057 | 0.267 | -0.059 | -0.214 | 0.831 |
| | Specialization | -0.116 | 0.286 | -0.119 | -0.407 | 0.684 |
| | pu | 0.025 | 0.125 | 0.023 | 0.128 | 0.791 |
| | inter_pu_jc | 0.069 | 0.017 | 0.272 | 4.159 | 0.000 |
| | inter_pu_ip | -0.132 | 0.087 | -0.841 | -1.513 | 0.131 |
| | inter_pu_ps | 0.138 | 0.073 | 0.905 | 1.886 | 0.060 |
| | inter_pu_sv | 0.049 | 0.075 | 0.311 | 0.644 | 0.520 |
| | inter_pu_spec | 0.070 | 0.081 | 0.451 | 0.863 | 0.388 |

Table 5-21a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.416 | 0.182 | | 2.283 | 0.023 |
| | Job_Complexity | 0.008 | 0.031 | 0.008 | 0.240 | 0.810 |
| | Info_Proc | 0.094 | 0.084 | 0.098 | 1.118 | 0.264 |
| | Prob_Sol | 0.223 | 0.070 | 0.235 | 3.210 | 0.001 |
| | Skill_Variety | 0.298 | 0.072 | 0.307 | 4.111 | 0.000 |
| | peou | 0.015 | 0.020 | 0.015 | 0.568 | 0.539 |
| | pu | 0.017 | 0.029 | 0.017 | 0.626 | 0.532 |
| | Specialization | 0.241 | 0.087 | 0.247 | 2.758 | 0.006 |

Table 5-21b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 2 | (Constant) | 0.555 | 0.219 | | 2.530 | 0.012 |
| | Job_Complexity | -0.036 | 0.050 | -0.039 | -0.732 | 0.465 |
| | Info_Proc | 0.080 | 0.085 | 0.083 | 0.938 | 0.349 |
| | Prob_Sol | 0.216 | 0.070 | 0.228 | 3.102 | 0.002 |
| | Skill_Variety | 0.291 | 0.073 | 0.300 | 4.003 | 0.000 |
| | Specialization | 0.243 | 0.087 | 0.250 | 2.785 | 0.006 |
| | peou | 0.001 | 0.010 | 0.001 | 1.345 | 0.330 |
| | pu | 0.003 | 0.011 | 0.003 | 1.128 | 0.210 |
| | inter_peou_pu_jc | 0.003 | 0.002 | 0.052 | 1.137 | 0.256 |

Table 5-21c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 3 | (Constant) | 0.754 | 0.224 | | 3.367 | 0.001 |
| | Job_Complexity | -0.158 | 0.061 | -0.170 | -2.607 | 0.010 |
| | Info_Proc | 0.153 | 0.087 | 0.159 | 1.770 | 0.078 |
| | Prob_Sol | 0.193 | 0.069 | 0.203 | 2.797 | 0.005 |
| | Skill_Variety | 0.280 | 0.072 | 0.289 | 3.910 | 0.000 |
| | Specialization | 0.237 | 0.086 | 0.244 | 2.757 | 0.006 |
| | peou | 0.010 | 0.092 | 0.009 | 2.568 | 0.564 |
| | pu | 0.012 | 0.076 | 0.011 | 3.845 | 0.522 |
| | inter_peou_pu_jc | 0.015 | 0.004 | 0.276 | 3.474 | 0.001 |
| | inter_peou_pu_ip | -0.008 | 0.002 | -0.211 | -3.417 | 0.001 |

Table 5-21d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.787 | 0.227 | | 3.472 | 0.001 |
| | Job_Complexity | -0.157 | 0.061 | -0.169 | -2.586 | 0.010 |
| | Info_Proc | 0.297 | 0.175 | 0.309 | 1.701 | 0.090 |
| | Prob_Sol | 0.044 | 0.172 | 0.046 | 0.253 | 0.800 |
| | Skill_Variety | 0.280 | 0.072 | 0.288 | 3.906 | 0.000 |
| | Specialization | 0.233 | 0.086 | 0.239 | 2.703 | 0.007 |
| | peou | 0.002 | 0.079 | 0.002 | 0.285 | 0.857 |
| | pu | 0.003 | 0.85 | 0.003 | 0.279 | 0.726 |
| | inter_peou_pu_jc | 0.014 | 0.004 | 0.261 | 3.226 | 0.001 |
| | inter_peou_pu_ip | -0.024 | 0.016 | -0.600 | -1.447 | 0.149 |
| | inter_peou_pu_ps | 0.016 | 0.017 | 0.401 | 0.948 | 0.344 |

Table 5-21e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.786 | 0.227 | | 3.467 | 0.001 |
| | Job_Complexity | -0.153 | 0.061 | -0.165 | -2.521 | 0.012 |
| | Info_Proc | 0.391 | 0.212 | 0.406 | 1.848 | 0.065 |
| | Prob_Sol | 0.081 | 0.179 | 0.085 | 0.452 | 0.652 |
| | Skill_Variety | 0.151 | 0.179 | 0.155 | 0.841 | 0.401 |
| | Specialization | 0.230 | 0.086 | 0.236 | 2.663 | 0.008 |
| | peou | 0.003 | 0.956 | 0.003 | 0.158 | 0.700 |
| | Pu | 0.001 | 0.851 | 0.001 | 0.147 | 0.792 |
| | inter_peou_pu_jc | 0.014 | 0.004 | 0.255 | 3.134 | 0.002 |
| | inter_peou_pu_ip | -0.033 | 0.021 | -0.848 | -1.628 | 0.104 |
| | inter_peou_pu_ps | 0.012 | 0.018 | 0.310 | 0.706 | 0.480 |
| | inter_peou_pu_sv | 0.014 | 0.017 | 0.343 | 0.788 | 0.432 |

Table 5-21f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.781 | 0.227 | | 3.444 | 0.001 |
| | Job_Complexity | -0.153 | 0.061 | -0.165 | -2.511 | 0.013 |
| | Info_Proc | 0.465 | 0.225 | 0.483 | 2.063 | 0.040 |
| | Prob_Sol | 0.113 | 0.182 | 0.118 | 0.619 | 0.536 |
| | Skill_Variety | 0.220 | 0.194 | 0.227 | 1.138 | 0.256 |
| | Specialization | 0.056 | 0.202 | 0.058 | 0.278 | 0.781 |
| | peou | 0.009 | 0.523 | 0.008 | 0.049 | 0.979 |
| | pu | 0.010 | 0.894 | 0.010 | 0.050 | 0.920 |
| | inter_peou_pu_jc | 0.014 | 0.004 | 0.261 | 3.192 | 0.002 |
| | inter_peou_pu_ip | -0.041 | 0.022 | -1.042 | -1.863 | 0.063 |
| | inter_peou_pu_ps | 0.009 | 0.018 | 0.235 | 0.526 | 0.599 |
| | inter_peou_pu_sv | 0.006 | 0.019 | 0.150 | 0.314 | 0.754 |
| | inter_peou_pu_spec | 0.018 | 0.019 | 0.450 | 0.953 | 0.341 |

Table 5-22a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.378 | 0.183 | | 2.067 | 0.039 |
| | Job_Complexity | 0.022 | 0.031 | 0.023 | 0.690 | 0.490 |
| | Info_Proc | 0.092 | 0.085 | 0.095 | 1.089 | 0.277 |
| | Prob_Sol | 0.135 | 0.070 | 0.141 | 1.933 | 0.054 |
| | Skill_Variety | 0.346 | 0.073 | 0.356 | 4.766 | 0.000 |
| | peou | 0.027 | 0.082 | 0.027 | 1.489 | 0.501 |
| | pu | 0.029 | 0.056 | 0.028 | 1.582 | 0.500 |
| | Specialization | 0.294 | 0.088 | 0.301 | 3.354 | 0.001 |

Table 5-22b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.431 | 0.220 | | 1.955 | 0.051 |
| | Job_Complexity | 0.005 | 0.050 | 0.005 | 0.098 | 0.922 |
| | Info_Proc | 0.087 | 0.086 | 0.090 | 1.012 | 0.312 |
| | Prob_Sol | 0.132 | 0.070 | 0.139 | 1.887 | 0.060 |
| | Skill_Variety | 0.344 | 0.073 | 0.353 | 4.708 | 0.000 |
| | Specialization | 0.295 | 0.088 | 0.302 | 3.360 | 0.001 |
| | peou | 0.030 | 0.792 | 0.029 | 1.250 | 0.253 |
| | pu | 0.032 | 0.549 | 0.030 | 1.256 | 0.240 |
| | inter_peou_pu_jc | 0.001 | 0.002 | 0.02 | 0.432 | 0.666 |

Table 5-22c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.602 | 0.226 | | 2.666 | 0.008 |
| | Job_Complexity | -0.100 | 0.061 | -0.107 | -1.634 | 0.103 |
| | Info_Proc | 0.150 | 0.087 | 0.155 | 1.715 | 0.087 |
| | Prob_Sol | 0.112 | 0.070 | 0.118 | 1.610 | 0.108 |
| | Skill_Variety | 0.335 | 0.072 | 0.344 | 4.626 | 0.000 |
| | Specialization | 0.289 | 0.087 | 0.297 | 3.335 | 0.001 |
| | peou | 0.006 | 0.891 | 0.006 | 1.110 | 0.265 |
| | pu | 0.002 | 0.765 | 0.002 | 1.106 | 0.267 |
| | inter_peou_pu_jc | 0.011 | 0.004 | 0.213 | 2.659 | 0.008 |
| | inter_peou_pu_ip | -0.007 | 0.002 | -0.182 | -2.920 | 0.004 |

Table 5-22d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.607 | 0.229 | | 2.652 | 0.008 |
| | Job_Complexity | -0.100 | 0.061 | -0.107 | -1.628 | 0.104 |
| | Info_Proc | 0.171 | 0.177 | 0.178 | 0.971 | 0.332 |
| | Prob_Sol | 0.090 | 0.174 | 0.094 | 0.517 | 0.606 |
| | Skill_Variety | 0.335 | 0.072 | 0.344 | 4.619 | 0.000 |
| | Specialization | 0.289 | 0.087 | 0.296 | 3.319 | 0.001 |
| | peou | 0.020 | 0.089 | 0.020 | 1.119 | 0.345 |
| | pu | 0.023 | 0.534 | 0.023 | 1.124 | 0.301 |
| | inter_peou_pu_jc | 0.011 | 0.004 | 0.210 | 2.579 | 0.010 |
| | inter_peou_pu_ip | -0.009 | 0.017 | -0.239 | -0.573 | 0.567 |
| | inter_peou_pu_ps | 0.002 | 0.017 | 0.060 | 0.1400 | 0.889 |

Table 5-22e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.607 | 0.229 | | 2.647 | 0.008 |
| | Job_Complexity | -0.097 | 0.061 | -0.105 | -1.586 | 0.114 |
| | Info_Proc | 0.232 | 0.214 | 0.241 | 1.087 | 0.278 |
| | Prob_Sol | 0.114 | 0.18 | 0.12 | 0.631 | 0.528 |
| | Skill_Variety | 0.251 | 0.181 | 0.257 | 1.383 | 0.168 |
| | Specialization | 0.287 | 0.087 | 0.294 | 3.289 | 0.001 |
| | peou | 0.001 | 0.47 | 0.001 | 0.856 | 0.562 |
| | pu | 0.002 | 0.59 | 0.002 | 0.912 | 0.517 |
| | inter_peou_pu_jc | 0.011 | 0.004 | 0.206 | 2.516 | 0.012 |
| | inter_peou_pu_ip | -0.016 | 0.021 | -0.4 | -0.762 | 0.447 |
| | inter_peou_pu_ps | 2.31E-05 | 0.018 | 0.001 | 0.001 | 0.999 |
| | inter_peou_pu_sv | 0.009 | 0.017 | 0.222 | 0.506 | 0.613 |

Table 5-22f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 6 | (Constant) | 0.602 | 0.229 | | 2.626 | 0.009 |
| | Job_Complexity | -0.097 | 0.061 | -0.104 | -1.576 | 0.116 |
| | Info_Proc | 0.298 | 0.228 | 0.309 | 1.310 | 0.191 |
| | Prob_Sol | 0.142 | 0.184 | 0.149 | 0.776 | 0.439 |
| | Skill_Variety | 0.313 | 0.196 | 0.321 | 1.599 | 0.111 |
| | Specialization | 0.131 | 0.204 | 0.135 | 0.644 | 0.520 |
| | peou | 0.007 | 0.582 | 0.007 | 0.416 | 0.599 |
| | pu | 0.008 | 0.421 | 0.008 | 0.418 | 0.595 |
| | inter_peou_pu_jc | 0.011 | 0.004 | 0.211 | 2.567 | 0.011 |
| | inter_peou_pu_ip | -0.023 | 0.022 | -0.573 | -1.016 | 0.310 |
| | inter_peou_pu_ps | -0.003 | 0.018 | -0.067 | -0.148 | 0.882 |
| | inter_peou_pu_sv | 0.002 | 0.019 | 0.050 | 0.104 | 0.917 |
| | inter_peou_pu_spec | 0.016 | 0.019 | 0.402 | 0.844 | 0.399 |

Table 5-23a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.486 | 0.188 | | 2.579 | 0.010 |
| | Job_Complexity | -0.014 | 0.032 | -0.014 | -0.418 | 0.676 |
| | Info_Proc | 0.035 | 0.087 | 0.036 | 0.407 | 0.684 |
| | Prob_Sol | 0.188 | 0.072 | 0.195 | 2.619 | 0.009 |
| | Skill_Variety | 0.324 | 0.075 | 0.329 | 4.329 | 0.000 |
| | peou | 0.025 | 0.089 | 0.024 | 1.010 | 0.320 |
| | pu | 0.030 | 0.074 | 0.029 | 0.016 | 0.308 |
| | Specialization | 0.303 | 0.090 | 0.306 | 3.356 | 0.001 |

Table 5-23b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.512 | 0.227 | | 2.254 | 0.025 |
| | Job_Complexity | -0.022 | 0.052 | -0.023 | -0.424 | 0.672 |
| | Info_Proc | 0.033 | 0.088 | 0.034 | 0.371 | 0.711 |
| | Prob_Sol | 0.187 | 0.072 | 0.194 | 2.588 | 0.010 |
| | Skill_Variety | 0.323 | 0.075 | 0.328 | 4.291 | 0.000 |
| | Specialization | 0.303 | 0.090 | 0.307 | 3.355 | 0.001 |
| | peou | 0.002 | 0.712 | 0.002 | 0.130 | 0.899 |
| | pu | 0.004 | 0.853 | 0.004 | 0.135 | 0.886 |
| | inter_peou_pu_jc | 0.001 | 0.002 | 0.010 | 0.208 | 0.836 |

Table 5-23c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.699 | 0.233 | | 3.006 | 0.003 |
| | Job_Complexity | -0.136 | 0.063 | -0.145 | -2.164 | 0.031 |
| | Info_Proc | 0.102 | 0.090 | 0.104 | 1.131 | 0.259 |
| | Prob_Sol | 0.165 | 0.072 | 0.171 | 2.302 | 0.022 |
| | Skill_Variety | 0.313 | 0.074 | 0.317 | 4.204 | 0.000 |
| | Specialization | 0.298 | 0.089 | 0.301 | 3.332 | 0.001 |
| | peou | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |
| | pu | 0.017 | 0.630 | 0.017 | 0.723 | 0.458 |
| | inter_peou_pu_jc | 0.012 | 0.004 | 0.218 | 2.676 | 0.008 |
| | inter_peou_pu_ip | -0.008 | 0.003 | -0.196 | -3.094 | 0.002 |

Table 5-23d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.717 | 0.236 | | 3.041 | 0.003 |
| | Job_Complexity | -0.136 | 0.063 | -0.144 | -2.151 | 0.032 |
| | Info_Proc | 0.178 | 0.182 | 0.182 | 0.979 | 0.328 |
| | Prob_Sol | 0.086 | 0.179 | 0.089 | 0.481 | 0.631 |
| | Skill_Variety | 0.313 | 0.075 | 0.317 | 4.197 | 0.000 |
| | Specialization | 0.296 | 0.090 | 0.299 | 3.299 | 0.001 |
| | peou | 0.015 | 0.025 | 0.014 | 0.721 | 0.462 |
| | pu | 0.020 | 0.084 | 0.020 | 0.785 | 0.436 |
| | inter_peou_pu_jc | 0.011 | 0.004 | 0.210 | 2.530 | 0.012 |
| | inter_peou_pu_ip | -0.016 | 0.017 | -0.398 | -0.937 | 0.349 |
| | inter_peou_pu_ps | 0.008 | 0.018 | 0.209 | 0.482 | 0.630 |

Table 5-23e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.716 | 0.236 | | 3.036 | 0.003 |
| | Job_Complexity | -0.134 | 0.063 | -0.142 | -2.118 | 0.035 |
| | Info_Proc | 0.219 | 0.220 | 0.224 | 0.996 | 0.320 |
| | Prob_Sol | 0.102 | 0.186 | 0.106 | 0.551 | 0.582 |
| | Skill_Variety | 0.256 | 0.187 | 0.259 | 1.372 | 0.171 |
| | Specialization | 0.294 | 0.090 | 0.298 | 3.276 | 0.001 |
| | peou | 0.009 | 0.056 | 0.009 | 0.075 | 0.861 |
| | pu | 0.010 | 0.047 | 0.010 | 0.086 | 0.810 |
| | inter_peou_pu_jc | 0.011 | 0.004 | 0.207 | 2.483 | 0.013 |
| | inter_peou_pu_ip | -0.020 | 0.021 | -0.506 | -0.948 | 0.344 |
| | inter_peou_pu_ps | 0.007 | 0.018 | 0.169 | 0.376 | 0.707 |
| | inter_peou_pu_sv | 0.006 | 0.018 | 0.149 | 0.334 | 0.738 |

Table 5-23f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.714 | 0.236 | | 3.021 | 0.003 |
| | Job_Complexity | -0.134 | 0.063 | -0.142 | -2.111 | 0.035 |
| | Info_Proc | 0.258 | 0.235 | 0.263 | 1.097 | 0.273 |
| | Prob_Sol | 0.119 | 0.189 | 0.123 | 0.628 | 0.530 |
| | Skill_Variety | 0.292 | 0.202 | 0.296 | 1.447 | 0.149 |
| | Specialization | 0.204 | 0.210 | 0.207 | 0.973 | 0.331 |
| | peou | 0.015 | 0.372 | 0.015 | 0.152 | 0.917 |
| | pu | 0.018 | 0.250 | 0.018 | 0.184 | 0.873 |
| | inter_peou_pu_jc | 0.011 | 0.005 | 0.210 | 2.507 | 0.013 |
| | inter_peou_pu_ip | -0.024 | 0.023 | -0.605 | -1.054 | 0.293 |
| | inter_peou_pu_ps | 0.005 | 0.019 | 0.131 | 0.286 | 0.775 |
| | inter_peou_pu_sv | 0.002 | 0.020 | 0.051 | 0.104 | 0.917 |
| | inter_peou_pu_spec | 0.009 | 0.020 | 0.229 | 0.473 | 0.637 |

Table 5-24a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.504 | 0.184 | | 2.736 | 0.007 |
| | Job_Complexity | -0.012 | 0.032 | -0.013 | -0.371 | 0.711 |
| | Info_Proc | 0.175 | 0.085 | 0.181 | 2.049 | 0.041 |
| | Prob_Sol | 0.146 | 0.070 | 0.153 | 2.075 | 0.039 |
| | Skill_Variety | 0.284 | 0.073 | 0.292 | 3.879 | 0.000 |
| | peou | 0.030 | 0.046 | 0.030 | 1.134 | 0.256 |
| | pu | 0.025 | 0.081 | 0.025 | 1.129 | 0.286 |
| | Specialization | 0.241 | 0.088 | 0.247 | 2.736 | 0.007 |

Table 5-24b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.511 | 0.222 | | 2.299 | 0.022 |
| | Job_Complexity | -0.014 | 0.050 | -0.015 | -0.277 | 0.782 |
| | Info_Proc | 0.174 | 0.086 | 0.180 | 2.015 | 0.045 |
| | Prob_Sol | 0.145 | 0.071 | 0.153 | 2.060 | 0.040 |
| | Skill_Variety | 0.284 | 0.074 | 0.291 | 3.855 | 0.000 |
| | Specialization | 0.241 | 0.088 | 0.247 | 2.733 | 0.007 |
| | peou | 0.001 | 0.065 | 0.001 | 1.157 | 0.312 |
| | pu | 0.000 | 0.047 | 0.001 | 1.154 | 0.313 |
| | inter_peou_pu_jc | 0.000 | 0.002 | 0.003 | 0.056 | 0.955 |

Table 5-24c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.714 | 0.226 | | 3.153 | 0.002 |
| | Job_Complexity | -0.138 | 0.061 | -0.149 | -2.259 | 0.024 |
| | Info_Proc | 0.249 | 0.088 | 0.258 | 2.840 | 0.005 |
| | Prob_Sol | 0.122 | 0.070 | 0.128 | 1.741 | 0.083 |
| | Skill_Variety | 0.273 | 0.073 | 0.280 | 3.760 | 0.000 |
| | Specialization | 0.235 | 0.087 | 0.241 | 2.705 | 0.007 |
| | peou | 0.013 | 0.074 | 0.013 | 0.846 | 0.425 |
| | pu | -0.018 | 0.069 | -0.018 | 0.921 | 0.420 |
| | inter_peou_pu_jc | 0.012 | 0.004 | 0.232 | 2.893 | 0.004 |
| | inter_peou_pu_ip | -0.009 | 0.002 | -0.216 | -3.461 | 0.001 |

Table 5-24d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.707 | 0.230 | | 3.082 | 0.002 |
| | Job_Complexity | -0.139 | 0.061 | -0.149 | -2.260 | 0.024 |
| | Info_Proc | 0.220 | 0.177 | 0.228 | 1.245 | 0.214 |
| | Prob_Sol | 0.151 | 0.174 | 0.159 | 0.868 | 0.386 |
| | Skill_Variety | 0.273 | 0.073 | 0.280 | 3.755 | 0.000 |
| | Specialization | 0.236 | 0.087 | 0.242 | 2.707 | 0.007 |
| | peou | 0.022 | 0.063 | 0.022 | 0.976 | 0.359 |
| | pu | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | inter_peou_pu_jc | 0.012 | 0.004 | 0.235 | 2.871 | 0.004 |
| | inter_peou_pu_ip | -0.005 | 0.017 | -0.139 | -0.331 | 0.741 |
| | inter_peou_pu_ps | -0.003 | 0.017 | -0.080 | -0.186 | 0.852 |

Table 5-24e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.708 | 0.230 | | 3.079 | 0.002 |
| | Job_Complexity | -0.140 | 0.062 | -0.150 | -2.272 | 0.024 |
| | Info_Proc | 0.186 | 0.214 | 0.192 | 0.865 | 0.387 |
| | Prob_Sol | 0.138 | 0.181 | 0.144 | 0.760 | 0.448 |
| | Skill_Variety | 0.321 | 0.182 | 0.330 | 1.766 | 0.078 |
| | Specialization | 0.237 | 0.087 | 0.243 | 2.714 | 0.007 |
| | peou | 0.023 | 0.026 | 0.023 | 0.083 | 0.926 |
| | pu | -0.011 | 0.067 | -0.011 | 0.062 | 0.956 |
| | inter_peou_pu_jc | 0.013 | 0.004 | 0.237 | 2.882 | 0.004 |
| | inter_peou_pu_ip | -0.002 | 0.021 | -0.047 | -0.089 | 0.929 |
| | inter_peou_pu_ps | -0.002 | 0.018 | -0.046 | -0.103 | 0.918 |
| | inter_peou_pu_sv | -0.005 | 0.018 | -0.127 | -0.289 | 0.772 |

Table 5-24f: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 6 | (Constant) | 0.704 | 0.230 | | 3.059 | 0.002 |
| | Job_Complexity | -0.139 | 0.062 | -0.150 | -2.262 | 0.024 |
| | Info_Proc | 0.246 | 0.229 | 0.254 | 1.075 | 0.283 |
| | Prob_Sol | 0.163 | 0.184 | 0.172 | 0.887 | 0.376 |
| | Skill_Variety | 0.378 | 0.196 | 0.388 | 1.923 | 0.055 |
| | Specialization | 0.096 | 0.204 | 0.098 | 0.470 | 0.639 |
| | peou | 0.004 | 0.029 | 0.004 | 0.109 | 0.993 |
| | pu | 0.005 | 0.047 | 0.005 | 0.112 | 0.920 |
| | inter_peou_pu_jc | 0.013 | 0.004 | 0.241 | 2.926 | 0.004 |
| | inter_peou_pu_ip | -0.008 | 0.022 | -0.204 | -0.361 | 0.719 |
| | inter_peou_pu_ps | -0.004 | 0.018 | -0.107 | -0.237 | 0.813 |
| | inter_peou_pu_sv | -0.011 | 0.019 | -0.283 | -0.584 | 0.560 |
| | inter_peou_pu_spec | 0.015 | 0.019 | 0.365 | 0.765 | 0.445 |

## APPENDIX H– Social Characteristics and KSB

Table 5-25a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.425 | 0.112 | | 3.801 | 0.000 |
| | Social_Support | 0.133 | 0.066 | 0.138 | 2.023 | 0.044 |
| | Initial_Inter | 0.240 | 0.066 | 0.250 | 3.624 | 0.000 |
| | Rec_Inter | 0.265 | 0.064 | 0.271 | 4.167 | 0.000 |
| | peou | 0.030 | 0.025 | 0.029 | 10150 | 0.243 |
| | Feedbck_from_Others | 0.227 | 0.065 | 0.237 | 3.496 | 0.001 |

Table 5-25b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 2 | (Constant) | 0.475 | 0.112 | | 4.255 | 0.000 |
| | Social_Support | 0.175 | 0.066 | 0.183 | 2.642 | 0.009 |
| | Initial_Inter | 0.250 | 0.065 | 0.260 | 3.815 | 0.000 |
| | Rec_Inter | 0.257 | 0.063 | 0.263 | 4.083 | 0.000 |
| | Feedbck_from_Others | 0.215 | 0.064 | 0.224 | 3.338 | 0.001 |
| | peou | 0.040 | 0.210 | 0.040 | 0.190 | 0.842 |
| | inter_peou_ss | -0.018 | 0.006 | -0.092 | -3.093 | 0.002 |

Table 5-25c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 3 | (Constant) | 0.479 | 0.111 | | 4.303 | 0.000 |
| | Social_Support | -0.123 | 0.168 | -0.128 | -0.734 | 0.464 |
| | Initial_Inter | 0.569 | 0.177 | 0.593 | 3.213 | 0.001 |
| | Rec_Inter | 0.242 | 0.063 | 0.246 | 3.816 | 0.000 |
| | Feedbck_from_Others | 0.210 | 0.064 | 0.219 | 3.275 | 0.001 |
| | peou | 0.030 | 0.025 | 0.029 | 10150 | 0.243 |
| | inter_peou_ss | 0.093 | 0.057 | 0.475 | 1.616 | 0.107 |
| | inter_peou_ini_inter | -0.110 | 0.057 | -0.579 | -1.938 | 0.053 |

Table 5-25d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.472 | 0.111 | | 4.240 | 0.000 |
| | Social_Support | -0.229 | 0.191 | -0.239 | -1.196 | 0.233 |
| | Initial_Inter | 0.476 | 0.195 | 0.496 | 2.445 | 0.015 |
| | Rec_Inter | 0.447 | 0.190 | 0.456 | 2.347 | 0.019 |
| | Feedbck_from_Others | 0.202 | 0.065 | 0.210 | 3.126 | 0.002 |
| | peou | 0.012 | 0.028 | 0.012 | 0.452 | 0.621 |
| | inter_peou_ss | 0.136 | 0.069 | 0.697 | 1.979 | 0.049 |
| | inter_peou_ini_inter | -0.078 | 0.064 | -0.408 | -1.221 | 0.223 |
| | inter_peou_rec_inter | -0.075 | 0.065 | -0.388 | -1.143 | 0.254 |

Table 5-25e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.458 | 0.112 | | 4.106 | 0.000 |
| | Social_Support | -0.142 | 0.199 | -0.148 | -0.714 | 0.476 |
| | Initial_Inter | 0.578 | 0.206 | 0.602 | 2.812 | 0.005 |
| | Rec_Inter | 0.513 | 0.195 | 0.524 | 2.634 | 0.009 |
| | Feedbck_from_Others | -0.051 | 0.178 | -0.053 | -0.286 | 0.775 |
| | peou | 0.012 | 0.025 | 0.012 | 0.482 | 0.629 |
| | inter_peou_ss | 0.100 | 0.073 | 0.511 | 1.372 | 0.171 |
| | inter_peou_ini_inter | -0.119 | 0.069 | -0.622 | -1.719 | 0.087 |
| | inter_peou_rec_inter | -0.096 | 0.067 | -0.499 | -1.439 | 0.151 |
| | inter_peou_feebck_othrs | 0.099 | 0.065 | 0.507 | 1.518 | 0.130 |

Table 5-26a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.425 | 0.112 | | 3.801 | 0.000 |
| | Social_Support | 0.133 | 0.066 | 0.138 | 2.023 | 0.044 |
| | Initial_Inter | 0.240 | 0.066 | 0.250 | 3.624 | 0.000 |
| | Rec_Inter | 0.265 | 0.064 | 0.271 | 4.167 | 0.000 |
| | Feedbck_from_Others | 0.227 | 0.065 | 0.237 | 3.496 | 0.001 |
| | peou | 0.030 | 0.025 | 0.029 | 10150 | 0.243 |

Table 5-26b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.475 | 0.112 | | 4.255 | 0.000 |
| | Social_Support | 0.175 | 0.066 | 0.183 | 2.642 | 0.009 |
| | Initial_Inter | 0.250 | 0.065 | 0.260 | 3.815 | 0.000 |
| | Rec_Inter | 0.257 | 0.063 | 0.263 | 4.083 | 0.000 |
| | Feedbck_from_Others | 0.215 | 0.064 | 0.224 | 3.338 | 0.001 |
| | peou | 0.040 | 0.210 | 0.040 | 0.190 | 0.842 |
| | inter_peou_ss | -0.018 | 0.006 | -0.092 | -3.093 | 0.002 |

Table 5-26c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.542 | 0.114 | | 4.758 | 0.000 |
| | Social_Support | -0.153 | 0.172 | -0.159 | -0.891 | 0.373 |
| | Initial_Inter | 0.628 | 0.181 | 0.653 | 3.467 | 0.001 |
| | Rec_Inter | 0.250 | 0.065 | 0.254 | 3.853 | 0.000 |
| | Feedbck_from_Others | 0.169 | 0.066 | 0.176 | 2.572 | 0.011 |
| | peou | 0.042 | 0.222 | 0.039 | 0.218 | 0.856 |
| | inter_peou_ss | 0.118 | 0.059 | 0.605 | 2.015 | 0.045 |
| | inter_peou_ini_inter | -0.137 | 0.058 | -0.715 | -2.345 | 0.020 |

Table 5-26d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.535 | 0.114 | | 4.692 | 0.000 |
| | Social_Support | -0.270 | 0.196 | -0.281 | -1.378 | 0.169 |
| | Initial_Inter | 0.525 | 0.199 | 0.546 | 2.639 | 0.009 |
| | Rec_Inter | 0.476 | 0.195 | 0.485 | 2.446 | 0.015 |
| | Feedbck_from_Others | 0.160 | 0.066 | 0.166 | 2.418 | 0.016 |
| | peou | 0.028 | 0.038 | 0.028 | 1.012 | 0.312 |
| | inter_peou_ss | 0.166 | 0.070 | 0.850 | 2.363 | 0.019 |
| | inter_peou_ini_inter | -0.101 | 0.065 | -0.527 | -1.545 | 0.123 |
| | inter_peou_rec_inter | -0.083 | 0.067 | -0.428 | -1.235 | 0.218 |

Table 5-26e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.528 | 0.114 | | 4.611 | 0.000 |
| | Social_Support | -0.227 | 0.205 | -0.236 | -1.110 | 0.268 |
| | Initial_Inter | 0.576 | 0.211 | 0.599 | 2.733 | 0.007 |
| | Rec_Inter | 0.510 | 0.200 | 0.518 | 2.548 | 0.011 |
| | Feedbck_from_Others | 0.034 | 0.183 | 0.035 | 0.186 | 0.852 |
| | peou | 0.060 | 0.075 | 0.059 | 0.853 | 0.308 |
| | inter_peou_ss | 0.148 | 0.075 | 0.758 | 1.987 | 0.048 |
| | inter_peou_ini_inter | -0.121 | 0.071 | -0.633 | -1.709 | 0.088 |
| | inter_peou_rec_inter | -0.093 | 0.069 | -0.482 | -1.361 | 0.174 |
| | inter_peou_feebck_othrs | 0.049 | 0.067 | 0.251 | 0.735 | 0.463 |

Table 5-27a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.402 | 0.116 | | 3.469 | 0.001 |
| | Social_Support | 0.157 | 0.068 | 0.161 | 2.307 | 0.022 |
| | Initial_Inter | 0.204 | 0.069 | 0.210 | 2.979 | 0.003 |
| | Rec_Inter | 0.266 | 0.066 | 0.267 | 4.032 | 0.000 |
| | peou | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | Feedbck_from_Others | 0.245 | 0.067 | 0.251 | 3.636 | 0.000 |

Table 5-27b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.467 | 0.115 | | 4.069 | 0.000 |
| | Social_Support | 0.212 | 0.068 | 0.218 | 3.112 | 0.002 |
| | Initial_Inter | 0.217 | 0.067 | 0.223 | 3.227 | 0.001 |
| | Rec_Inter | 0.255 | 0.065 | 0.257 | 3.942 | 0.000 |
| | Feedbck_from_Others | 0.229 | 0.066 | 0.235 | 3.456 | 0.001 |
| | peou | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_peou_ss | -0.023 | 0.006 | -0.118 | -3.918 | 0.000 |

Table 5-27c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.472 | 0.114 | | 4.129 | 0.000 |
| | Social_Support | -0.144 | 0.172 | -0.148 | -0.837 | 0.403 |
| | Initial_Inter | 0.598 | 0.182 | 0.613 | 3.292 | 0.001 |
| | Rec_Inter | 0.237 | 0.065 | 0.238 | 3.643 | 0.000 |
| | Feedbck_from_Others | 0.223 | 0.066 | 0.229 | 3.388 | 0.001 |
| | peou | 0.002 | 0.042 | 0.002 | 1.110 | 0.286 |
| | inter_peou_ss | 0.109 | 0.059 | 0.549 | 1.847 | 0.066 |
| | inter_peou_ini_inter | -0.132 | 0.058 | -0.680 | -2.255 | 0.025 |

Table 5-27d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.469 | 0.114 | | 4.094 | 0.000 |
| | Social_Support | -0.191 | 0.197 | -0.196 | -0.972 | 0.332 |
| | Initial_Inter | 0.556 | 0.200 | 0.571 | 2.781 | 0.006 |
| | Rec_Inter | 0.328 | 0.196 | 0.330 | 1.680 | 0.094 |
| | Feedbck_from_Others | 0.219 | 0.066 | 0.225 | 3.306 | 0.001 |
| | peou | 0.007 | 0.196 | 0.007 | 0.037 | 0.969 |
| | inter_peou_ss | 0.128 | 0.071 | 0.647 | 1.814 | 0.071 |
| | inter_peou_ini_inter | -0.117 | 0.065 | -0.605 | -1.791 | 0.074 |
| | inter_peou_rec_inter | -0.033 | 0.067 | -0.171 | -0.498 | 0.619 |

Table 5-27e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.455 | 0.115 | | 3.968 | 0.000 |
| | Social_Support | -0.109 | 0.205 | -0.112 | -0.531 | 0.596 |
| | Initial_Inter | 0.654 | 0.211 | 0.671 | 3.093 | 0.002 |
| | Rec_Inter | 0.392 | 0.200 | 0.394 | 1.956 | 0.051 |
| | Feedbck_from_Others | -0.022 | 0.183 | -0.022 | -0.118 | 0.906 |
| | peou | 0.030 | 0.019 | 0.030 | 1.128 | 0.369 |
| | inter_peou_ss | 0.094 | 0.075 | 0.472 | 1.252 | 0.212 |
| | inter_peou_ini_inter | -0.156 | 0.071 | -0.806 | -2.200 | 0.028 |
| | inter_peou_rec_inter | -0.054 | 0.069 | -0.275 | -0.784 | 0.434 |
| | inter_peou_feebck_othrs | 0.094 | 0.067 | 0.476 | 1.407 | 0.160 |

Table 5-28a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.450 | 0.115 | | 3.926 | 0.000 |
| | Social_Support | 0.182 | 0.067 | 0.189 | 2.707 | 0.007 |
| | Initial_Inter | 0.268 | 0.068 | 0.278 | 3.950 | 0.000 |
| | Rec_Inter | 0.247 | 0.065 | 0.251 | 3.782 | 0.000 |
| | peou | 0.005 | 0.019 | 0.004 | 0.294 | 0.879 |
| | Feedbck_from_Others | 0.164 | 0.067 | 0.171 | 2.463 | 0.014 |

Table 5-28b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.517 | 0.113 | | 4.566 | 0.000 |
| | Social_Support | 0.239 | 0.067 | 0.249 | 3.556 | 0.000 |
| | Initial_Inter | 0.281 | 0.066 | 0.292 | 4.233 | 0.000 |
| | Rec_Inter | 0.236 | 0.064 | 0.240 | 3.688 | 0.000 |
| | Feedbck_from_Others | 0.147 | 0.065 | 0.153 | 2.256 | 0.025 |
| | peou | 0.004 | 0.054 | 0.004 | 0.070 | 0.957 |
| | inter_peou_ss | -0.024 | 0.006 | -0.123 | -4.108 | 0.000 |

Table 5-28c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.522 | 0.112 | | 4.639 | 0.000 |
| | Social_Support | -0.147 | 0.169 | -0.152 | -0.865 | 0.388 |
| | Initial_Inter | 0.693 | 0.179 | 0.720 | 3.876 | 0.000 |
| | Rec_Inter | 0.215 | 0.064 | 0.219 | 3.366 | 0.001 |
| | Feedbck_from_Others | 0.141 | 0.065 | 0.147 | 2.177 | 0.030 |
| | peou | 0.006 | 0.070 | 0.005 | 0.089 | 0.945 |
| | inter_peou_ss | 0.119 | 0.058 | 0.608 | 2.051 | 0.041 |
| | inter_peou_ini_inter | -0.143 | 0.058 | -0.746 | -2.479 | 0.014 |

Table 5-28d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.517 | 0.113 | | 4.586 | 0.000 |
| | Social_Support | -0.231 | 0.194 | -0.240 | -1.191 | 0.235 |
| | Initial_Inter | 0.620 | 0.197 | 0.644 | 3.148 | 0.002 |
| | Rec_Inter | 0.378 | 0.192 | 0.385 | 1.964 | 0.050 |
| | Feedbck_from_Others | 0.134 | 0.065 | 0.140 | 2.060 | 0.040 |
| | peou | 0.001 | 0.045 | 0.001 | 0.020 | 0.968 |
| | inter_peou_ss | 0.153 | 0.070 | 0.784 | 2.205 | 0.028 |
| | inter_peou_ini_inter | -0.117 | 0.064 | -0.611 | -1.814 | 0.070 |
| | inter_peou_rec_inter | -0.059 | 0.066 | -0.307 | -0.897 | 0.370 |

Table 5-28e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.509 | 0.113 | | 4.502 | 0.000 |
| | Social_Support | -0.185 | 0.202 | -0.192 | -0.916 | 0.360 |
| | Initial_Inter | 0.673 | 0.208 | 0.700 | 3.230 | 0.001 |
| | Rec_Inter | 0.413 | 0.198 | 0.420 | 2.090 | 0.037 |
| | Feedbck_from_Others | 0.002 | 0.181 | 0.002 | 0.010 | 0.992 |
| | peou | 0.025 | 0.125 | 0.023 | 0.128 | 0.791 |
| | inter_peou_ss | 0.134 | 0.074 | 0.686 | 1.822 | 0.069 |
| | inter_peou_ini_inter | -0.138 | 0.070 | -0.723 | -1.976 | 0.049 |
| | inter_peou_rec_inter | -0.071 | 0.068 | -0.365 | -1.042 | 0.298 |
| | inter_peou_feebck_othrs | 0.052 | 0.066 | 0.265 | 0.786 | 0.432 |

Table 5-29a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.425 | 0.112 | | 3.801 | 0.000 |
| | Social_Support | 0.133 | 0.066 | 0.138 | 2.023 | 0.044 |
| | Initial_Inter | 0.240 | 0.066 | 0.250 | 3.624 | 0.000 |
| | Rec_Inter | 0.265 | 0.064 | 0.271 | 4.167 | 0.000 |
| | pu | 0.015 | 0.020 | 0.015 | 0.568 | 0.539 |
| | Feedbck_from_Others | 0.227 | 0.065 | 0.237 | 3.496 | 0.001 |

Table 5-29b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.557 | 0.140 | | 11.126 | 0.000 |
| | Social_Support | -0.484 | 0.079 | -0.505 | -6.117 | 0.000 |
| | Initial_Inter | 0.156 | 0.058 | 0.163 | 2.715 | 0.007 |
| | Rec_Inter | 0.210 | 0.055 | 0.215 | 3.812 | 0.000 |
| | Feedbck_from_Others | 0.087 | 0.057 | 0.090 | 1.508 | 0.132 |
| | pu | 0.001 | 0.010 | 0.001 | 1.345 | 0.330 |
| | inter_pu_ss | 0.148 | 0.013 | 0.941 | 11.163 | 0.000 |

Table 5-29c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.553 | 0.140 | | 11.123 | 0.000 |
| | Social_Support | -0.151 | 0.221 | -0.157 | -0.685 | 0.494 |
| | Initial_Inter | -0.170 | 0.210 | -0.177 | -0.812 | 0.417 |
| | Rec_Inter | 0.193 | 0.056 | 0.197 | 3.443 | 0.001 |
| | Feedbck_from_Others | 0.095 | 0.058 | 0.099 | 1.645 | 0.101 |
| | pu | 0.010 | 0.092 | 0.009 | 2.568 | 0.564 |
| | inter_pu_ss | 0.051 | 0.061 | 0.327 | 0.841 | 0.401 |
| | inter_pu_ini_inter | 0.098 | 0.060 | 0.616 | 1.619 | 0.106 |

Table 5-29d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.558 | 0.140 | | 11.136 | 0.000 |
| | Social_Support | -0.050 | 0.261 | -0.053 | -0.193 | 0.847 |
| | Initial_Inter | -0.130 | 0.217 | -0.135 | -0.598 | 0.550 |
| | Rec_Inter | 0.054 | 0.202 | 0.055 | 0.265 | 0.791 |
| | Feedbck_from_Others | 0.097 | 0.058 | 0.101 | 1.683 | 0.093 |
| | pu | 0.002 | 0.079 | 0.002 | 0.285 | 0.857 |
| | inter_pu_ss | 0.023 | 0.073 | 0.147 | 0.318 | 0.750 |
| | inter_pu_ini_inter | 0.084 | 0.063 | 0.529 | 1.323 | 0.187 |
| | inter_pu_rec_inter | 0.041 | 0.057 | 0.260 | 0.719 | 0.473 |

Table 5-29e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 1.570 | 0.141 | | 11.123 | 0.000 |
| | Social_Support | -0.019 | 0.266 | -0.019 | -0.070 | 0.944 |
| | Initial_Inter | -0.077 | 0.231 | -0.080 | -0.334 | 0.738 |
| | Rec_Inter | 0.108 | 0.217 | 0.110 | 0.496 | 0.620 |
| | Feedbck_from_Others | -0.049 | 0.220 | -0.051 | -0.223 | 0.824 |
| | pu | 0.003 | 0.956 | 0.003 | 0.158 | 0.700 |
| | inter_pu_ss | 0.013 | 0.074 | 0.081 | 0.172 | 0.863 |
| | inter_pu_ini_inter | 0.069 | 0.067 | 0.438 | 1.040 | 0.299 |
| | inter_pu_rec_inter | 0.025 | 0.061 | 0.161 | 0.414 | 0.679 |
| | inter_pu_feedbck_othrs | 0.041 | 0.060 | 0.265 | 0.688 | 0.492 |

Table 5-30a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.485 | 0.115 | | 4.227 | 0.000 |
| | Social_Support | 0.172 | 0.067 | 0.179 | 2.555 | 0.011 |
| | Initial_Inter | 0.223 | 0.068 | 0.232 | 3.279 | 0.001 |
| | Rec_Inter | 0.278 | 0.065 | 0.283 | 4.246 | 0.000 |
| | pu | 0.009 | 0.523 | 0.008 | 0.049 | 0.979 |
| | Feedbck_from_Others | 0.188 | 0.067 | 0.195 | 2.814 | 0.005 |

Table 5-30b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 1.624 | 0.145 | | 11.223 | 0.000 |
| | Social_Support | -0.449 | 0.082 | -0.466 | -5.479 | 0.000 |
| | Initial_Inter | 0.139 | 0.060 | 0.144 | 2.332 | 0.020 |
| | Rec_Inter | 0.222 | 0.057 | 0.226 | 3.896 | 0.000 |
| | Feedbck_from_Others | 0.046 | 0.059 | 0.048 | 0.780 | 0.436 |
| | pu | 0.027 | 0.082 | 0.027 | 1.489 | 0.501 |
| | inter_pu_ss | 0.149 | 0.014 | 0.944 | 10.860 | 0.000 |

Table 5-30c: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 3 | (Constant) | 1.620 | 0.145 | | 11.213 | 0.000 |
| | Social_Support | -0.155 | 0.228 | -0.161 | -0.678 | 0.498 |
| | Initial_Inter | -0.149 | 0.217 | -0.155 | -0.688 | 0.492 |
| | Rec_Inter | 0.207 | 0.058 | 0.211 | 3.567 | 0.000 |
| | Feedbck_from_Others | 0.053 | 0.060 | 0.056 | 0.897 | 0.370 |
| | pu | 0.030 | 0.792 | 0.029 | 1.250 | 0.253 |
| | inter_pu_ss | 0.064 | 0.063 | 0.404 | 1.007 | 0.314 |
| | inter_pu_ini_inter | 0.086 | 0.062 | 0.542 | 1.380 | 0.169 |

Coefficients[a]

Table 5-30d: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 4 | (Constant) | 1.627 | 0.145 | | 11.247 | 0.000 |
| | Social_Support | -0.007 | 0.270 | -0.007 | -0.025 | 0.980 |
| | Initial_Inter | -0.090 | 0.225 | -0.093 | -0.400 | 0.690 |
| | Rec_Inter | 0.002 | 0.209 | 0.002 | 0.009 | 0.993 |
| | Feedbck_from_Others | 0.057 | 0.060 | 0.059 | 0.954 | 0.341 |
| | pu | 0.006 | 0.891 | 0.006 | 1.110 | 0.265 |
| | inter_pu_ss | 0.022 | 0.075 | 0.140 | 0.294 | 0.769 |
| | inter_pu_ini_inter | 0.066 | 0.065 | 0.414 | 1.003 | 0.316 |
| | inter_pu_rec_inter | 0.060 | 0.059 | 0.381 | 1.022 | 0.308 |

Coefficients[a]

Table 5-30e: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 5 | (Constant) | 1.648 | 0.146 | | 11.299 | 0.000 |
| | Social_Support | 0.046 | 0.274 | 0.048 | 0.168 | 0.867 |
| | Initial_Inter | -0.002 | 0.238 | -0.002 | -0.008 | 0.994 |
| | Rec_Inter | 0.092 | 0.224 | 0.093 | 0.409 | 0.683 |
| | Feedbck_from_Others | -0.186 | 0.227 | -0.193 | -0.819 | 0.413 |
| | pu | 0.020 | 0.089 | 0.020 | 1.119 | 0.345 |
| | inter_pu_ss | 0.005 | 0.077 | 0.031 | 0.064 | 0.949 |
| | inter_pu_ini_inter | 0.042 | 0.069 | 0.263 | 0.607 | 0.544 |
| | inter_pu_rec_inter | 0.034 | 0.063 | 0.217 | 0.543 | 0.588 |
| | inter_pu_feedbck_othrs | 0.069 | 0.062 | 0.440 | 1.108 | 0.269 |

Table 5-31a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.402 | 0.116 | | 3.469 | 0.001 |
| | Social_Support | 0.157 | 0.068 | 0.161 | 2.307 | 0.022 |
| | Initial_Inter | 0.204 | 0.069 | 0.210 | 2.979 | 0.003 |
| | Rec_Inter | 0.266 | 0.066 | 0.267 | 4.032 | 0.000 |
| | pu | 0.001 | 0.47 | 0.001 | 0.856 | 0.562 |
| | Feedbck_from_Others | 0.245 | 0.067 | 0.251 | 3.636 | 0.000 |

Table 5-31b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.512 | 0.148 | | 10.242 | 0.000 |
| | Social_Support | -0.448 | 0.084 | -0.460 | -5.367 | 0.000 |
| | Initial_Inter | 0.122 | 0.061 | 0.126 | 2.015 | 0.045 |
| | Rec_Inter | 0.212 | 0.058 | 0.213 | 3.643 | 0.000 |
| | Feedbck_from_Others | 0.107 | 0.061 | 0.110 | 1.766 | 0.078 |
| | pu | 0.007 | 0.582 | 0.007 | 0.416 | 0.599 |
| | inter_pu_ss | 0.145 | 0.014 | 0.909 | 10.378 | 0.000 |

Table 5-31c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.509 | 0.147 | | 10.230 | 0.000 |
| | Social_Support | -0.164 | 0.233 | -0.168 | -0.704 | 0.482 |
| | Initial_Inter | -0.156 | 0.221 | -0.160 | -0.705 | 0.481 |
| | Rec_Inter | 0.197 | 0.059 | 0.198 | 3.332 | 0.001 |
| | Feedbck_from_Others | 0.114 | 0.061 | 0.117 | 1.873 | 0.062 |
| | pu | 0.025 | 0.089 | 0.024 | 1.010 | 0.320 |
| | inter_pu_ss | 0.063 | 0.065 | 0.393 | 0.973 | 0.331 |
| | inter_pu_ini_inter | 0.083 | 0.064 | 0.518 | 1.308 | 0.192 |

Table 5-31d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.512 | 0.148 | | 10.235 | 0.000 |
| | Social_Support | -0.079 | 0.276 | -0.081 | -0.287 | 0.774 |
| | Initial_Inter | -0.122 | 0.229 | -0.125 | -0.532 | 0.595 |
| | Rec_Inter | 0.080 | 0.213 | 0.080 | 0.374 | 0.709 |
| | Feedbck_from_Others | 0.116 | 0.061 | 0.119 | 1.901 | 0.058 |
| | pu | 0.002 | 0.712 | 0.002 | 0.130 | 0.899 |
| | inter_pu_ss | 0.039 | 0.077 | 0.244 | 0.507 | 0.612 |
| | inter_pu_ini_inter | 0.072 | 0.067 | 0.445 | 1.070 | 0.285 |
| | inter_pu_rec_inter | 0.034 | 0.060 | 0.215 | 0.573 | 0.567 |

Table 5-31e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 1.535 | 0.149 | | 10.310 | 0.000 |
| | Social_Support | -0.021 | 0.280 | -0.022 | -0.075 | 0.940 |
| | Initial_Inter | -0.025 | 0.243 | -0.026 | -0.104 | 0.917 |
| | Rec_Inter | 0.179 | 0.229 | 0.179 | 0.780 | 0.436 |
| | Feedbck_from_Others | -0.152 | 0.232 | -0.156 | -0.653 | 0.514 |
| | pu | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |
| | inter_pu_ss | 0.020 | 0.078 | 0.125 | 0.255 | 0.799 |
| | inter_pu_ini_inter | 0.045 | 0.070 | 0.281 | 0.643 | 0.520 |
| | inter_pu_rec_inter | 0.006 | 0.065 | 0.038 | 0.094 | 0.925 |
| | inter_pu_feedbck_othrs | 0.075 | 0.063 | 0.478 | 1.194 | 0.233 |

Table 5-32a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.450 | 0.115 | | 3.926 | 0.000 |
| | Social_Support | 0.182 | 0.067 | 0.189 | 2.707 | 0.007 |
| | Initial_Inter | 0.268 | 0.068 | 0.278 | 3.950 | 0.000 |
| | Rec_Inter | 0.247 | 0.065 | 0.251 | 3.782 | 0.000 |
| | pu | 0.015 | 0.025 | 0.014 | 0.721 | 0.462 |
| | Feedbck_from_Others | 0.164 | 0.067 | 0.171 | 2.463 | 0.014 |

Table 5-32b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 1.584 | 0.144 | | 10.975 | 0.000 |
| | Social_Support | -0.437 | 0.082 | -0.454 | -5.346 | 0.000 |
| | Initial_Inter | 0.184 | 0.059 | 0.191 | 3.098 | 0.002 |
| | Rec_Inter | 0.191 | 0.057 | 0.195 | 3.363 | 0.001 |
| | Feedbck_from_Others | 0.023 | 0.059 | 0.024 | 0.388 | 0.698 |
| | inter_pu_ss | 0.149 | 0.014 | 0.941 | 10.848 | 0.000 |

Table 5-32c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 1.582 | 0.144 | | 10.955 | 0.000 |
| | Social_Support | -0.258 | 0.228 | -0.267 | -1.129 | 0.260 |
| | Initial_Inter | 0.008 | 0.217 | 0.009 | 0.038 | 0.969 |
| | Rec_Inter | 0.182 | 0.058 | 0.185 | 3.141 | 0.002 |
| | Feedbck_from_Others | 0.027 | 0.059 | 0.028 | 0.459 | 0.646 |
| | pu | 0.009 | 0.056 | 0.009 | 0.075 | 0.861 |
| | inter_pu_ss | 0.097 | 0.063 | 0.611 | 1.526 | 0.128 |
| | inter_pu_ini_inter | 0.052 | 0.062 | 0.331 | 0.842 | 0.400 |

Table 5-32d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 1.592 | 0.144 | | 11.032 | 0.000 |
| | Social_Support | -0.034 | 0.270 | -0.036 | -0.128 | 0.899 |
| | Initial_Inter | 0.098 | 0.224 | 0.102 | 0.437 | 0.662 |
| | Rec_Inter | -0.127 | 0.208 | -0.129 | -0.610 | 0.542 |
| | Feedbck_from_Others | 0.033 | 0.059 | 0.034 | 0.548 | 0.584 |
| | pu | 0.015 | 0.372 | 0.015 | 0.152 | 0.917 |
| | inter_pu_ss | 0.034 | 0.075 | 0.214 | 0.450 | 0.653 |
| | inter_pu_ini_inter | 0.022 | 0.065 | 0.137 | 0.333 | 0.739 |
| | inter_pu_rec_inter | 0.091 | 0.059 | 0.574 | 1.545 | 0.123 |

Table 5-32e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 1.595 | 0.146 | | 10.948 | 0.000 |
| | Social_Support | -0.026 | 0.274 | -0.027 | -0.094 | 0.925 |
| | Initial_Inter | 0.112 | 0.238 | 0.116 | 0.471 | 0.638 |
| | Rec_Inter | -0.113 | 0.224 | -0.115 | -0.504 | 0.615 |
| | Feedbck_from_Others | -0.006 | 0.227 | -0.007 | -0.029 | 0.977 |
| | pu | 0.030 | 0.046 | 0.030 | 1.134 | 0.256 |
| | inter_pu_ss | 0.031 | 0.077 | 0.196 | 0.404 | 0.687 |
| | inter_pu_ini_inter | 0.018 | 0.069 | 0.113 | 0.260 | 0.795 |
| | inter_pu_rec_inter | 0.087 | 0.063 | 0.548 | 1.369 | 0.172 |
| | inter_pu_feedbck_othrs | 0.011 | 0.062 | 0.071 | 0.178 | 0.859 |

Table 5-33a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.425 | 0.112 | | 3.801 | 0.000 |
| | Social_Support | 0.133 | 0.066 | 0.138 | 2.023 | 0.044 |
| | Initial_Inter | 0.240 | 0.066 | 0.250 | 3.624 | 0.000 |
| | Rec_Inter | 0.265 | 0.064 | 0.271 | 4.167 | 0.000 |
| | peou | 0.001 | 0.065 | 0.001 | 1.157 | 0.312 |
| | pu | 0.000 | 0.047 | 0.001 | 1.154 | 0.313 |
| | Feedbck_from_Others | 0.227 | 0.065 | 0.237 | 3.496 | 0.001 |

Table 5-33b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.413 | 0.113 | | 3.659 | 0.000 |
| | Social_Support | 0.145 | 0.067 | 0.151 | 2.156 | 0.032 |
| | Initial_Inter | 0.244 | 0.066 | 0.255 | 3.681 | 0.000 |
| | Rec_Inter | 0.265 | 0.064 | 0.270 | 4.157 | 0.000 |
| | Feedbck_from_Others | 0.226 | 0.065 | 0.236 | 3.484 | 0.001 |
| | peou | 0.013 | 0.074 | 0.013 | 0.846 | 0.425 |
| | pu | -0.018 | 0.069 | -0.018 | 0.921 | 0.420 |
| | inter_peou_pu_ss | -0.001 | 0.001 | -0.029 | -0.885 | 0.377 |

Table 5-33c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.419 | 0.113 | | 3.719 | 0.000 |
| | Social_Support | -0.030 | 0.146 | -0.031 | -0.205 | 0.838 |
| | Initial_Inter | 0.424 | 0.149 | 0.442 | 2.838 | 0.005 |
| | Rec_Inter | 0.264 | 0.064 | 0.269 | 4.143 | 0.000 |
| | Feedbck_from_Others | 0.221 | 0.065 | 0.231 | 3.397 | 0.001 |
| | peou | 0.022 | 0.063 | 0.022 | 0.976 | 0.359 |
| | pu | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | inter_peou_pu_ss | 0.018 | 0.014 | 0.443 | 1.254 | 0.210 |
| | inter_peou_pu_ini_inter | -0.019 | 0.014 | -0.476 | -1.342 | 0.180 |

Table 5-33d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.410 | 0.114 | | 3.608 | 0.000 |
| | Social_Support | -0.083 | 0.168 | -0.087 | -0.496 | 0.620 |
| | Initial_Inter | 0.388 | 0.160 | 0.405 | 2.433 | 0.015 |
| | Rec_Inter | 0.357 | 0.157 | 0.364 | 2.269 | 0.024 |
| | Feedbck_from_Others | 0.218 | 0.065 | 0.227 | 3.333 | 0.001 |
| | peou | 0.023 | 0.026 | 0.023 | 0.083 | 0.926 |
| | pu | -0.011 | 0.067 | -0.011 | 0.062 | 0.956 |
| | inter_peou_pu_ss | 0.024 | 0.017 | 0.595 | 1.403 | 0.162 |
| | inter_peou_pu_ini_inter | -0.015 | 0.016 | -0.371 | -0.953 | 0.341 |
| | inter_peou_pu_rec_inter | -0.010 | 0.016 | -0.255 | -0.648 | 0.517 |

Table 5-33e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 5 | (Constant) | 0.410 | 0.114 | | 3.610 | 0.000 |
| | Social_Support | -0.032 | 0.171 | -0.033 | -0.184 | 0.854 |
| | Initial_Inter | 0.460 | 0.167 | 0.480 | 2.761 | 0.006 |
| | Rec_Inter | 0.432 | 0.165 | 0.441 | 2.614 | 0.009 |
| | Feedbck_from_Others | 0.017 | 0.152 | 0.017 | 0.110 | 0.913 |
| | peou | 0.004 | 0.029 | 0.004 | 0.109 | 0.993 |
| | pu | 0.005 | 0.047 | 0.005 | 0.112 | 0.920 |
| | inter_peou_pu_ss | 0.017 | 0.018 | 0.431 | 0.982 | 0.327 |
| | inter_peou_pu_ini_inter | -0.023 | 0.017 | -0.577 | -1.394 | 0.164 |
| | inter_peou_pu_rec_inter | -0.018 | 0.017 | -0.444 | -1.074 | 0.283 |
| | inter_peou_pu_feedbck_othrs | 0.023 | 0.016 | 0.560 | 1.463 | 0.144 |

Table 5-34a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.485 | 0.115 | | 4.227 | 0.000 |
| | Social_Support | 0.172 | 0.067 | 0.179 | 2.555 | 0.011 |
| | Initial_Inter | 0.223 | 0.068 | 0.232 | 3.279 | 0.001 |
| | Rec_Inter | 0.278 | 0.065 | 0.283 | 4.246 | 0.000 |
| | peou | 0.001 | 0.045 | 0.001 | 0.020 | 0.968 |
| | pu | 0.025 | 0.125 | 0.023 | 0.128 | 0.791 |
| | Feedbck_from_Others | 0.188 | 0.067 | 0.195 | 2.814 | 0.005 |

Table 5-34b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.471 | 0.116 | | 4.068 | 0.000 |
| | Social_Support | 0.186 | 0.069 | 0.193 | 2.701 | 0.007 |
| | Initial_Inter | 0.228 | 0.068 | 0.237 | 3.347 | 0.001 |
| | Rec_Inter | 0.277 | 0.065 | 0.282 | 4.236 | 0.000 |
| | Feedbck_from_Others | 0.187 | 0.067 | 0.194 | 2.801 | 0.005 |
| | peou | 0.015 | 0.020 | 0.015 | 0.568 | 0.539 |
| | pu | 0.017 | 0.029 | 0.017 | 0.626 | 0.532 |
| | inter_peou_pu_ss | -0.001 | 0.001 | -0.033 | -0.995 | 0.320 |

Table 5-34c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.480 | 0.115 | | 4.160 | 0.000 |
| | Social_Support | -0.063 | 0.150 | -0.065 | -0.419 | 0.675 |
| | Initial_Inter | 0.484 | 0.153 | 0.503 | 3.163 | 0.002 |
| | Rec_Inter | 0.275 | 0.065 | 0.280 | 4.224 | 0.000 |
| | Feedbck_from_Others | 0.179 | 0.067 | 0.186 | 2.688 | 0.008 |
| | peou | 0.001 | 0.010 | 0.001 | 1.345 | 0.330 |
| | pu | 0.003 | 0.011 | 0.003 | 1.128 | 0.210 |
| | inter_peou_pu_ss | 0.026 | 0.015 | 0.637 | 1.767 | 0.078 |
| | inter_peou_pu_ini_inter | -0.027 | 0.015 | -0.676 | -1.867 | 0.063 |

Table 5-34d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.471 | 0.116 | | 4.047 | 0.000 |
| | Social_Support | -0.117 | 0.172 | -0.121 | -0.678 | 0.498 |
| | Initial_Inter | 0.448 | 0.163 | 0.465 | 2.741 | 0.006 |
| | Rec_Inter | 0.370 | 0.161 | 0.376 | 2.294 | 0.022 |
| | Feedbck_from_Others | 0.176 | 0.067 | 0.183 | 2.628 | 0.009 |
| | peou | 0.010 | 0.092 | 0.009 | 2.568 | 0.564 |
| | pu | 0.012 | 0.076 | 0.011 | 3.845 | 0.522 |
| | inter_peou_pu_ss | 0.032 | 0.018 | 0.790 | 1.824 | 0.069 |
| | inter_peou_pu_ini_inter | -0.023 | 0.016 | -0.571 | -1.434 | 0.152 |
| | inter_peou_pu_rec_inter | -0.010 | 0.016 | -0.257 | -0.639 | 0.523 |

Table 5-34e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.471 | 0.116 | | 4.044 | 0.000 |
| | Social_Support | -0.082 | 0.176 | -0.085 | -0.465 | 0.642 |
| | Initial_Inter | 0.497 | 0.171 | 0.516 | 2.904 | 0.004 |
| | Rec_Inter | 0.420 | 0.169 | 0.428 | 2.480 | 0.014 |
| | Feedbck_from_Others | 0.040 | 0.156 | 0.041 | 0.254 | 0.799 |
| | peou | 0.002 | 0.079 | 0.002 | 0.285 | 0.857 |
| | pu | 0.003 | 0.85 | 0.003 | 0.279 | 0.726 |
| | inter_peou_pu_ss | 0.028 | 0.018 | 0.679 | 1.515 | 0.131 |
| | inter_peou_pu_ini_inter | -0.029 | 0.017 | -0.709 | -1.676 | 0.095 |
| | inter_peou_pu_rec_inter | -0.015 | 0.017 | -0.385 | -0.909 | 0.364 |
| | inter_peou_pu_feedbck_othrs | 0.015 | 0.016 | 0.378 | 0.965 | 0.335 |

Table 5-35a: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.402 | 0.116 | | 3.469 | 0.001 |
| | Social_Support | 0.157 | 0.068 | 0.161 | 2.307 | 0.022 |
| | Initial_Inter | 0.204 | 0.069 | 0.210 | 2.979 | 0.003 |
| | Rec_Inter | 0.266 | 0.066 | 0.267 | 4.032 | 0.000 |
| | peou | 0.003 | 0.956 | 0.003 | 0.158 | 0.700 |
| | pu | 0.001 | 0.851 | 0.001 | 0.147 | 0.792 |
| | Feedbck_from_Others | 0.245 | 0.067 | 0.251 | 3.636 | 0.000 |

Table 5-35b: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.375 | 0.116 | | 3.221 | 0.001 |
| | Social_Support | 0.182 | 0.069 | 0.187 | 2.631 | 0.009 |
| | Initial_Inter | 0.214 | 0.069 | 0.220 | 3.123 | 0.002 |
| | Rec_Inter | 0.265 | 0.066 | 0.266 | 4.027 | 0.000 |
| | Feedbck_from_Others | 0.243 | 0.067 | 0.250 | 3.626 | 0.000 |
| | peou | 0.009 | 0.523 | 0.008 | 0.049 | 0.979 |
| | pu | 0.010 | 0.894 | 0.010 | 0.050 | 0.920 |
| | inter_peou_pu_ss | -0.003 | 0.001 | -0.061 | -1.848 | 0.065 |

Table 5-35c: Impact of Individual Predictors on Dependent Variable

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.384 | 0.116 | | 3.305 | 0.001 |
| | Social_Support | -0.055 | 0.151 | -0.056 | -0.363 | 0.717 |
| | Initial_Inter | 0.458 | 0.154 | 0.470 | 2.974 | 0.003 |
| | Rec_Inter | 0.263 | 0.066 | 0.265 | 4.013 | 0.000 |
| | Feedbck_from_Others | 0.236 | 0.067 | 0.242 | 3.518 | 0.000 |
| | peou | 0.027 | 0.082 | 0.027 | 1.489 | 0.501 |
| | pu | 0.029 | 0.056 | 0.028 | 1.582 | 0.500 |
| | inter_peou_pu_ss | 0.023 | 0.015 | 0.569 | 1.589 | 0.113 |
| | inter_peou_pu_ini_inter | -0.026 | 0.015 | -0.636 | -1.768 | 0.078 |

Table 5-35d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.380 | 0.117 | | 3.245 | 0.001 |
| | Social_Support | -0.076 | 0.173 | -0.078 | -0.440 | 0.660 |
| | Initial_Inter | 0.444 | 0.164 | 0.455 | 2.697 | 0.007 |
| | Rec_Inter | 0.301 | 0.162 | 0.302 | 1.853 | 0.065 |
| | Feedbck_from_Others | 0.234 | 0.067 | 0.241 | 3.483 | 0.001 |
| | peou | 0.030 | 0.792 | 0.029 | 1.250 | 0.253 |
| | pu | 0.032 | 0.549 | 0.030 | 1.256 | 0.240 |
| | inter_peou_pu_ss | 0.026 | 0.018 | 0.629 | 1.461 | 0.145 |
| | inter_peou_pu_ini_inter | -0.024 | 0.016 | -0.595 | -1.503 | 0.134 |
| | inter_peou_pu_rec_inter | -0.004 | 0.016 | -0.101 | -0.252 | 0.801 |

Table 5-35e: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.380 | 0.117 | | 3.247 | 0.001 |
| | Social_Support | -0.024 | 0.177 | -0.025 | -0.136 | 0.892 |
| | Initial_Inter | 0.516 | 0.172 | 0.530 | 3.004 | 0.003 |
| | Rec_Inter | 0.376 | 0.170 | 0.378 | 2.207 | 0.028 |
| | Feedbck_from_Others | 0.032 | 0.157 | 0.033 | 0.204 | 0.838 |
| | peou | 0.006 | 0.891 | 0.006 | 1.110 | 0.265 |
| | pu | 0.002 | 0.765 | 0.002 | 1.106 | 0.267 |
| | inter_peou_pu_ss | 0.019 | 0.018 | 0.466 | 1.047 | 0.296 |
| | inter_peou_pu_ini_inter | -0.033 | 0.017 | -0.798 | -1.901 | 0.058 |
| | inter_peou_pu_rec_inter | -0.012 | 0.017 | -0.288 | -0.686 | 0.493 |
| | inter_peou_pu_feedbck_othrs | 0.023 | 0.016 | 0.555 | 1.429 | 0.154 |

Table 5-36a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.450 | 0.115 | | 3.926 | 0.000 |
| | Social_Support | 0.182 | 0.067 | 0.189 | 2.707 | 0.007 |
| | Initial_Inter | 0.268 | 0.068 | 0.278 | 3.950 | 0.000 |
| | Rec_Inter | 0.247 | 0.065 | 0.251 | 3.782 | 0.000 |
| | peou | 0.020 | 0.089 | 0.020 | 1.119 | 0.345 |
| | pu | 0.023 | 0.534 | 0.023 | 1.124 | 0.301 |
| | Feedbck_from_Others | 0.164 | 0.067 | 0.171 | 2.463 | 0.014 |

Table 5-36b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.422 | 0.115 | | 3.669 | 0.000 |
| | Social_Support | 0.208 | 0.068 | 0.216 | 3.039 | 0.003 |
| | Initial_Inter | 0.278 | 0.068 | 0.289 | 4.101 | 0.000 |
| | Rec_Inter | 0.245 | 0.065 | 0.250 | 3.777 | 0.000 |
| | Feedbck_from_Others | 0.162 | 0.066 | 0.169 | 2.449 | 0.015 |
| | peou | 0.001 | 0.47 | 0.001 | 0.856 | 0.562 |
| | pu | 0.002 | 0.59 | 0.002 | 0.912 | 0.517 |
| | inter_peou_pu_ss | -0.003 | 0.001 | -0.064 | -1.918 | 0.056 |

Table 5-36c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.433 | 0.115 | | 3.779 | 0.000 |
| | Social_Support | -0.077 | 0.149 | -0.080 | -0.518 | 0.605 |
| | Initial_Inter | 0.571 | 0.152 | 0.594 | 3.761 | 0.000 |
| | Rec_Inter | 0.244 | 0.065 | 0.248 | 3.765 | 0.000 |
| | Feedbck_from_Others | 0.153 | 0.066 | 0.160 | 2.321 | 0.021 |
| | peou | 0.007 | 0.582 | 0.007 | 0.416 | 0.599 |
| | pu | 0.008 | 0.421 | 0.008 | 0.418 | 0.595 |
| | inter_peou_pu_ss | 0.029 | 0.015 | 0.704 | 1.969 | 0.050 |
| | inter_peou_pu_ini_inter | -0.031 | 0.014 | -0.775 | -2.156 | 0.032 |

Table 5-36d: Impact of Individual Predictors on Dependent Variable

| | | | | | | |
|---|---|---|---|---|---|---|
| **Coefficients[a]** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.435 | 0.116 | | 3.760 | 0.000 |
| | Social_Support | -0.066 | 0.171 | -0.069 | -0.390 | 0.697 |
| | Initial_Inter | 0.578 | 0.162 | 0.601 | 3.566 | 0.000 |
| | Rec_Inter | 0.225 | 0.160 | 0.229 | 1.408 | 0.160 |
| | Feedbck_from_Others | 0.154 | 0.066 | 0.160 | 2.320 | 0.021 |
| | peou | 0.025 | 0.089 | 0.024 | 1.010 | 0.320 |
| | pu | 0.030 | 0.074 | 0.029 | 0.016 | 0.308 |
| | inter_peou_pu_ss | 0.027 | 0.017 | 0.674 | 1.567 | 0.118 |
| | inter_peou_pu_ini_inter | -0.032 | 0.016 | -0.795 | -2.013 | 0.045 |
| | inter_peou_pu_rec_inter | 0.002 | 0.016 | 0.050 | 0.126 | 0.900 |

Table 5-36e: Impact of Individual Predictors on Dependent Variable

| | | | | | | |
|---|---|---|---|---|---|---|
| **Coefficients[a]** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 5 | (Constant) | 0.435 | 0.116 | | 3.755 | 0.000 |
| | Social_Support | -0.048 | 0.175 | -0.050 | -0.275 | 0.783 |
| | Initial_Inter | 0.604 | 0.170 | 0.628 | 3.554 | 0.000 |
| | Rec_Inter | 0.252 | 0.168 | 0.256 | 1.496 | 0.136 |
| | Feedbck_from_Others | 0.082 | 0.155 | 0.086 | 0.530 | 0.596 |
| | peou | 0.002 | 0.712 | 0.002 | 0.130 | 0.899 |
| | pu | 0.004 | 0.853 | 0.004 | 0.135 | 0.886 |
| | inter_peou_pu_ss | 0.025 | 0.018 | 0.616 | 1.381 | 0.168 |
| | inter_peou_pu_ini_inter | -0.035 | 0.017 | -0.868 | -2.065 | 0.040 |
| | inter_peou_pu_rec_inter | 0.000 | 0.017 | -0.017 | -0.041 | 0.967 |
| | inter_peou_pu_feedbck_othrs | 0.008 | 0.016 | 0.199 | 0.513 | 0.609 |

## APPENDIX I – Contextual Characteristics and KSB

Table 5-37a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.527 | 0.205 | | 2.574 | 0.010 |
| | Physical_Demands | 0.001 | 0.038 | 0.001 | 0.026 | 0.979 |
| | Work_Conditions | 0.510 | 0.053 | 0.529 | 9.572 | 0.000 |
| | peou | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |
| | Software_Tools_Used | 0.327 | 0.054 | 0.340 | 6.055 | 0.000 |

Table 5-37b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.497 | 0.205 | | 2.429 | 0.016 |
| | Physical_Demands | 0.095 | 0.059 | 0.088 | 1.595 | 0.112 |
| | Work_Conditions | 0.511 | 0.053 | 0.529 | 9.619 | 0.000 |
| | Software_Tools_Used | 0.319 | 0.054 | 0.332 | 5.921 | 0.000 |
| | peou | 0.015 | 0.025 | 0.014 | 0.721 | 0.462 |
| | inter_peou_pd | -0.024 | 0.012 | -0.110 | -2.070 | 0.039 |

Table 5-37c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.465 | 0.204 | | 2.281 | 0.023 |
| | Physical_Demands | -0.002 | 0.074 | -0.002 | -0.031 | 0.976 |
| | Work_Conditions | 0.576 | 0.061 | 0.596 | 9.497 | 0.000 |
| | Software_Tools_Used | 0.321 | 0.054 | 0.333 | 5.975 | 0.000 |
| | peou | 0.009 | 0.056 | 0.009 | 0.075 | 0.861 |
| | inter_peou_pd | 0.009 | 0.019 | 0.041 | 0.474 | 0.636 |
| | inter_peou_wc | -0.022 | 0.010 | -0.115 | -2.186 | 0.029 |

Table 5-37d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.461 | 0.204 | | 2.261 | 0.024 |
| | Physical_Demands | 0.020 | 0.075 | 0.019 | 0.269 | 0.788 |
| | Work_Conditions | 0.771 | 0.154 | 0.799 | 5.005 | 0.000 |
| | Software_Tools_Used | 0.120 | 0.155 | 0.125 | 0.773 | 0.440 |
| | peou | 0.015 | 0.372 | 0.015 | 0.152 | 0.917 |
| | inter_peou_pd | 0.002 | 0.020 | 0.009 | 0.104 | 0.917 |
| | inter_peou_wc | -0.095 | 0.054 | -0.493 | -1.767 | 0.078 |
| | inter_peou_sftwre_tools | 0.075 | 0.054 | 0.388 | 1.380 | 0.168 |

Table 5-38a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.527 | 0.205 | | 2.574 | 0.010 |
| | Physical_Demands | 0.001 | 0.038 | 0.001 | 0.026 | 0.979 |
| | Work_Conditions | 0.510 | 0.053 | 0.529 | 9.572 | 0.000 |
| | Software_Tools_Used | 0.327 | 0.054 | 0.340 | 6.055 | 0.000 |
| | peou | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |

Table 5-38b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.497 | 0.205 | | 2.429 | 0.016 |
| | Physical_Demands | 0.095 | 0.059 | 0.088 | 1.595 | 0.112 |
| | Work_Conditions | 0.511 | 0.053 | 0.529 | 9.619 | 0.000 |
| | Software_Tools_Used | 0.319 | 0.054 | 0.332 | 5.921 | 0.000 |
| | peou | 0.015 | 0.025 | 0.014 | 0.721 | 0.462 |
| | inter_peou_pd | -0.024 | 0.012 | -0.110 | -2.070 | 0.039 |

Table 5-38c Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.465 | 0.206 | | 2.260 | 0.024 |
| | Physical_Demands | 0.003 | 0.074 | 0.003 | 0.040 | 0.968 |
| | Work_Conditions | 0.609 | 0.061 | 0.629 | 9.950 | 0.000 |
| | Software_Tools_Used | 0.298 | 0.054 | 0.309 | 5.502 | 0.000 |
| | peou | 0.013 | 0.074 | 0.013 | 0.846 | 0.425 |
| | inter_peou_pd | 0.011 | 0.019 | 0.050 | 0.577 | 0.564 |
| | inter_peou_wc | -0.024 | 0.010 | -0.125 | -2.377 | 0.018 |

Table 5-38d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.459 | 0.205 | | 2.238 | 0.026 |
| | Physical_Demands | 0.032 | 0.076 | 0.029 | 0.417 | 0.677 |
| | Work_Conditions | 0.858 | 0.155 | 0.886 | 5.526 | 0.000 |
| | Software_Tools_Used | 0.042 | 0.156 | 0.044 | 0.270 | 0.788 |
| | peou | 0.022 | 0.063 | 0.022 | 0.976 | 0.359 |
| | inter_peou_pd | 0.002 | 0.020 | 0.010 | 0.111 | 0.911 |
| | inter_peou_wc | -0.117 | 0.054 | -0.606 | -2.163 | 0.031 |
| | inter_peou_sftwre_tools | 0.096 | 0.055 | 0.493 | 1.746 | 0.082 |

Table 5-39a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.448 | 0.206 | | 2.172 | 0.031 |
| | Physical_Demands | 0.008 | 0.039 | 0.007 | 0.195 | 0.845 |
| | Work_Conditions | 0.553 | 0.054 | 0.564 | 10.297 | 0.000 |
| | peou | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | Software_Tools_Used | 0.303 | 0.054 | 0.310 | 5.559 | 0.000 |

Table 5-39b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.411 | 0.205 | | 1.998 | 0.046 |
| | Physical_Demands | 0.123 | 0.060 | 0.113 | 2.065 | 0.040 |
| | Work_Conditions | 0.553 | 0.053 | 0.564 | 10.379 | 0.000 |
| | Software_Tools_Used | 0.293 | 0.054 | 0.300 | 5.407 | 0.000 |
| | peou | 0.023 | 0.026 | 0.023 | 0.083 | 0.926 |
| | inter_peou_pd | -0.030 | 0.012 | -0.133 | -2.541 | 0.011 |

Table 5-39c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.367 | 0.204 | | 1.804 | 0.072 |
| | Physical_Demands | -0.009 | 0.074 | -0.009 | -0.127 | 0.899 |
| | Work_Conditions | 0.642 | 0.061 | 0.655 | 10.610 | 0.000 |
| | Software_Tools_Used | 0.295 | 0.054 | 0.301 | 5.498 | 0.000 |
| | peou | 0.004 | 0.029 | 0.004 | 0.109 | 0.993 |
| | inter_peou_pd | 0.016 | 0.019 | 0.070 | 0.817 | 0.414 |
| | inter_peou_wc | -0.030 | 0.010 | -0.154 | -2.992 | 0.003 |

Table 5-39d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.362 | 0.203 | | 1.782 | 0.076 |
| | Physical_Demands | 0.016 | 0.075 | 0.015 | 0.214 | 0.831 |
| | Work_Conditions | 0.864 | 0.154 | 0.881 | 5.616 | 0.000 |
| | Software_Tools_Used | 0.067 | 0.155 | 0.069 | 0.436 | 0.663 |
| | peou | 0.020 | 0.052 | 0.019 | 0.359 | 0.540 |
| | inter_peou_pd | 0.008 | 0.020 | 0.034 | 0.390 | 0.697 |
| | inter_peou_wc | -0.113 | 0.054 | -0.575 | -2.101 | 0.036 |
| | inter_peou_sftwre_tools | 0.085 | 0.054 | 0.433 | 1.565 | 0.118 |

Table 5-40a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.611 | 0.205 | | 2.981 | 0.003 |
| | Physical_Demands | -0.019 | 0.039 | -0.018 | -0.491 | 0.624 |
| | Work_Conditions | 0.535 | 0.053 | 0.553 | 10.040 | 0.000 |
| | peou | 0.010 | 0.025 | 0.010 | 0.320 | 0.652 |
| | Software_Tools_Used | 0.293 | 0.054 | 0.304 | 5.430 | 0.000 |

Table 5-40b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.574 | 0.204 | | 2.813 | 0.005 |
| | Physical_Demands | 0.095 | 0.059 | 0.088 | 1.605 | 0.109 |
| | Work_Conditions | 0.536 | 0.053 | 0.553 | 10.119 | 0.000 |
| | Software_Tools_Used | 0.284 | 0.054 | 0.294 | 5.278 | 0.000 |
| | peou | 0.014 | 0.025 | 0.012 | 0.502 | 0.520 |
| | inter_peou_pd | -0.029 | 0.012 | -0.133 | -2.524 | 0.012 |

Table 5-40c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 0.531 | 0.202 | | 2.625 | 0.009 |
| | Physical_Demands | -0.037 | 0.073 | -0.034 | -0.500 | 0.618 |
| | Work_Conditions | 0.624 | 0.060 | 0.644 | 10.381 | 0.000 |
| | Software_Tools_Used | 0.286 | 0.053 | 0.296 | 5.368 | 0.000 |
| | peou | 0.015 | 0.020 | 0.014 | 0.582 | 0.526 |
| | inter_peou_pd | 0.016 | 0.019 | 0.071 | 0.828 | 0.408 |
| | inter_peou_wc | -0.030 | 0.010 | -0.155 | -2.992 | 0.003 |

Table 5-40d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.526 | 0.202 | | 2.606 | 0.010 |
| | Physical_Demands | -0.014 | 0.075 | -0.013 | -0.184 | 0.854 |
| | Work_Conditions | 0.821 | 0.153 | 0.848 | 5.376 | 0.000 |
| | Software_Tools_Used | 0.083 | 0.154 | 0.086 | 0.541 | 0.589 |
| | peou | 0.020 | 0.026 | 0.020 | 0.701 | 0.418 |
| | inter_peou_pd | 0.009 | 0.020 | 0.039 | 0.441 | 0.659 |
| | inter_peou_wc | -0.104 | 0.053 | -0.535 | -1.943 | 0.053 |
| | inter_peou_sftwre_tools | 0.076 | 0.054 | 0.391 | 1.405 | 0.161 |

Table 5-41a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.527 | 0.205 | | 2.574 | 0.010 |
| | Physical_Demands | 0.001 | 0.038 | 0.001 | 0.026 | 0.979 |
| | Work_Conditions | 0.510 | 0.053 | 0.529 | 9.572 | 0.000 |
| | pu | 0.004 | 0.020 | 0.004 | 0.182 | 0.864 |
| | Software_Tools_Used | 0.327 | 0.054 | 0.340 | 6.055 | 0.000 |

Table 5-41b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 2.027 | 0.232 | | 8.742 | 0.000 |
| | Physical_Demands | -0.586 | 0.066 | -0.546 | -8.835 | 0.000 |
| | Work_Conditions | 0.241 | 0.054 | 0.249 | 4.474 | 0.000 |
| | Software_Tools_Used | 0.197 | 0.049 | 0.205 | 4.009 | 0.000 |
| | pu | 0.082 | 0.065 | 0.056 | 1.129 | 0.146 |
| | inter_pu_pd | 0.168 | 0.016 | 0.522 | 10.291 | 0.000 |

Table 5-41c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 2.342 | 0.218 | | 10.751 | 0.000 |
| | Physical_Demands | -0.369 | 0.067 | -0.343 | -5.484 | 0.000 |
| | Work_Conditions | -0.259 | 0.080 | -0.268 | -3.227 | 0.001 |
| | Software_Tools_Used | 0.118 | 0.047 | 0.122 | 2.533 | 0.012 |
| | pu | 0.040 | 0.210 | 0.040 | 0.190 | 0.842 |
| | inter_pu_pd | 0.117 | 0.016 | 0.362 | 7.100 | 0.000 |
| | inter_pu_wc | 0.118 | 0.015 | 0.759 | 7.918 | 0.000 |

Table 5-41d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 2.323 | 0.217 | | 10.706 | 0.000 |
| | Physical_Demands | -0.325 | 0.070 | -0.302 | -4.643 | 0.000 |
| | Work_Conditions | 0.063 | 0.171 | 0.065 | 0.368 | 0.713 |
| | Software_Tools_Used | -0.223 | 0.166 | -0.232 | -1.343 | 0.180 |
| | pu | 0.030 | 0.025 | 0.029 | 10150 | 0.243 |
| | inter_pu_pd | 0.105 | 0.017 | 0.327 | 6.124 | 0.000 |
| | inter_pu_wc | 0.023 | 0.047 | 0.149 | 0.493 | 0.622 |
| | inter_pu_sftwr_tools | 0.100 | 0.047 | 0.658 | 2.137 | 0.033 |

Table 5-42a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.532 | 0.207 | | 2.568 | 0.011 |
| | Physical_Demands | 0.011 | 0.039 | 0.010 | 0.286 | 0.775 |
| | Work_Conditions | 0.537 | 0.054 | 0.555 | 9.964 | 0.000 |
| | pu | 0.012 | 0.028 | 0.012 | 0.452 | 0.621 |
| | Software_Tools_Used | 0.305 | 0.055 | 0.316 | 5.579 | 0.000 |

Table 5-42b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 2 | (Constant) | 1.941 | 0.239 | | 8.122 | 0.000 |
| | Physical_Demands | -0.541 | 0.068 | -0.502 | -7.904 | 0.000 |
| | Work_Conditions | 0.283 | 0.055 | 0.293 | 5.115 | 0.000 |
| | Software_Tools_Used | 0.183 | 0.051 | 0.189 | 3.601 | 0.000 |
| | pu | 0.012 | 0.025 | 0.012 | 0.482 | 0.629 |
| | inter_pu_pd | 0.158 | 0.017 | 0.489 | 9.381 | 0.000 |

Table 5-42c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 3 | (Constant) | 2.260 | 0.225 | | 10.039 | 0.000 |
| | Physical_Demands | -0.320 | 0.069 | -0.297 | -4.604 | 0.000 |
| | Work_Conditions | -0.223 | 0.083 | -0.231 | -2.692 | 0.007 |
| | Software_Tools_Used | 0.102 | 0.048 | 0.106 | 2.123 | 0.034 |
| | pu | 0.010 | 0.020 | 0.010 | 0.400 | 0.653 |
| | inter_pu_pd | 0.106 | 0.017 | 0.328 | 6.227 | 0.000 |
| | inter_pu_wc | 0.119 | 0.015 | 0.768 | 7.771 | 0.000 |

Table 5-42d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 4 | (Constant) | 2.241 | 0.224 | | 9.991 | 0.000 |
| | Physical_Demands | -0.276 | 0.072 | -0.256 | -3.815 | 0.000 |
| | Work_Conditions | 0.099 | 0.176 | 0.103 | 0.563 | 0.574 |
| | Software_Tools_Used | -0.240 | 0.172 | -0.248 | -1.395 | 0.164 |
| | pu | 0.025 | 0.520 | 0.024 | 0.152 | 0.856 |
| | inter_pu_pd | 0.094 | 0.018 | 0.292 | 5.309 | 0.000 |
| | inter_pu_wc | 0.024 | 0.048 | 0.158 | 0.507 | 0.612 |
| | inter_pu_sftwr_tools | 0.100 | 0.048 | 0.658 | 2.071 | 0.039 |

Table 5-43a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 0.448 | 0.206 | | 2.172 | 0.031 |
| | Physical_Demands | 0.008 | 0.039 | 0.007 | 0.195 | 0.845 |
| | Work_Conditions | 0.553 | 0.054 | 0.564 | 10.297 | 0.000 |
| | pu | 0.042 | 0.222 | 0.039 | 0.218 | 0.856 |
| | Software_Tools_Used | 0.303 | 0.054 | 0.310 | 5.559 | 0.000 |

Table 5-43b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 2 | (Constant) | 1.711 | 0.244 | | 7.021 | 0.000 |
| | Physical_Demands | -0.487 | 0.070 | -0.446 | -6.981 | 0.000 |
| | Work_Conditions | 0.326 | 0.057 | 0.332 | 5.766 | 0.000 |
| | Software_Tools_Used | 0.193 | 0.052 | 0.198 | 3.735 | 0.000 |
| | pu | 0.028 | 0.038 | 0.028 | 1.012 | 0.312 |
| | inter_pu_pd | 0.142 | 0.017 | 0.433 | 8.244 | 0.000 |

Table 5-43c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 3 | (Constant) | 2.031 | 0.230 | | 8.816 | 0.000 |
| | Physical_Demands | -0.266 | 0.071 | -0.244 | -3.743 | 0.000 |
| | Work_Conditions | -0.181 | 0.085 | -0.185 | -2.134 | 0.034 |
| | Software_Tools_Used | 0.113 | 0.049 | 0.115 | 2.289 | 0.023 |
| | pu | 0.060 | 0.075 | 0.059 | 0.853 | 0.308 |
| | inter_pu_pd | 0.089 | 0.017 | 0.273 | 5.142 | 0.000 |
| | inter_pu_wc | 0.119 | 0.016 | 0.759 | 7.599 | 0.000 |

Table 5-43d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 2.011 | 0.229 | | 8.764 | 0.000 |
| | Physical_Demands | -0.220 | 0.074 | -0.201 | -2.972 | 0.003 |
| | Work_Conditions | 0.159 | 0.180 | 0.162 | 0.879 | 0.380 |
| | Software_Tools_Used | -0.247 | 0.176 | -0.253 | -1.408 | 0.160 |
| | pu | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | inter_pu_pd | 0.077 | 0.018 | 0.237 | 4.255 | 0.000 |
| | inter_pu_wc | 0.020 | 0.049 | 0.124 | 0.395 | 0.693 |
| | inter_pu_sftwr_tools | 0.106 | 0.050 | 0.684 | 2.133 | 0.034 |

Table 5-44a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.611 | 0.205 | | 2.981 | 0.003 |
| | Physical_Demands | -0.019 | 0.039 | -0.018 | -0.491 | 0.624 |
| | Work_Conditions | 0.535 | 0.053 | 0.553 | 10.040 | 0.000 |
| | pu | 0.001 | 0.010 | 0.001 | 0.231 | 0.865 |
| | Software_Tools_Used | 0.293 | 0.054 | 0.304 | 5.430 | 0.000 |

Table 5-44b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 1.974 | 0.238 | | 8.306 | 0.000 |
| | Physical_Demands | -0.553 | 0.068 | -0.513 | -8.126 | 0.000 |
| | Work_Conditions | 0.290 | 0.055 | 0.300 | 5.261 | 0.000 |
| | Software_Tools_Used | 0.175 | 0.050 | 0.182 | 3.475 | 0.001 |
| | pu | 0.002 | 0.042 | 0.002 | 1.110 | 0.286 |
| | inter_pu_pd | 0.153 | 0.017 | 0.473 | 9.126 | 0.000 |

Table 5-44c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 2.273 | 0.226 | | 10.046 | 0.000 |
| | Physical_Demands | -0.347 | 0.070 | -0.322 | -4.969 | 0.000 |
| | Work_Conditions | -0.183 | 0.083 | -0.189 | -2.195 | 0.029 |
| | Software_Tools_Used | 0.100 | 0.048 | 0.104 | 2.072 | 0.039 |
| | pu | 0.007 | 0.196 | 0.007 | 0.037 | 0.969 |
| | inter_pu_pd | 0.104 | 0.017 | 0.323 | 6.104 | 0.000 |
| | inter_pu_wc | 0.111 | 0.015 | 0.717 | 7.219 | 0.000 |

Table 5-44d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 2.251 | 0.225 | | 10.003 | 0.000 |
| | Physical_Demands | -0.298 | 0.073 | -0.276 | -4.103 | 0.000 |
| | Work_Conditions | 0.178 | 0.177 | 0.184 | 1.006 | 0.315 |
| | Software_Tools_Used | -0.282 | 0.172 | -0.292 | -1.637 | 0.102 |
| | pu | 0.030 | 0.019 | 0.030 | 1.128 | 0.369 |
| | inter_pu_pd | 0.091 | 0.018 | 0.283 | 5.125 | 0.000 |
| | inter_pu_wc | 0.005 | 0.048 | 0.034 | 0.109 | 0.913 |
| | inter_pu_sftwr_tools | 0.112 | 0.049 | 0.736 | 2.310 | 0.021 |

5-45a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.527 | 0.205 | | 2.574 | 0.010 |
| | Physical_Demands | 0.001 | 0.038 | 0.001 | 0.026 | 0.979 |
| | Work_Conditions | 0.510 | 0.053 | 0.529 | 9.572 | 0.000 |
| | peou | 0.009 | 0.523 | 0.008 | 0.049 | 0.979 |
| | pu | 0.010 | 0.894 | 0.010 | 0.050 | 0.920 |
| | Software_Tools_Used | 0.327 | 0.054 | 0.340 | 6.055 | 0.000 |

5-45b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.700 | 0.222 | | 3.148 | 0.002 |
| | Physical_Demands | -0.071 | 0.053 | -0.066 | -1.331 | 0.184 |
| | Work_Conditions | 0.482 | 0.055 | 0.499 | 8.758 | 0.000 |
| | Software_Tools_Used | 0.321 | 0.054 | 0.334 | 5.962 | 0.000 |
| | peou | 0.027 | 0.082 | 0.027 | 1.489 | 0.501 |
| | pu | 0.029 | 0.056 | 0.028 | 1.582 | 0.500 |
| | inter_peou_pu_pd | 0.006 | 0.003 | 0.079 | 1.955 | 0.051 |

5-45c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 3 | (Constant) | 1.056 | 0.225 | | 4.703 | 0.000 |
| | Physical_Demands | -0.335 | 0.071 | -0.312 | -4.706 | 0.000 |
| | Work_Conditions | 0.555 | 0.055 | 0.575 | 10.129 | 0.000 |
| | Software_Tools_Used | 0.309 | 0.052 | 0.321 | 5.936 | 0.000 |
| | peou | 0.030 | 0.792 | 0.029 | 1.250 | 0.253 |
| | pu | 0.032 | 0.549 | 0.030 | 1.256 | 0.240 |
| | inter_peou_pu_pd | 0.031 | 0.006 | 0.440 | 5.640 | 0.000 |
| | inter_peou_pu_wc | -0.014 | 0.003 | -0.357 | -5.337 | 0.000 |

5-45d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 1.041 | 0.224 | | 4.645 | 0.000 |
| | Physical_Demands | -0.314 | 0.072 | -0.293 | -4.360 | 0.000 |
| | Work_Conditions | 0.735 | 0.122 | 0.762 | 6.013 | 0.000 |
| | Software_Tools_Used | 0.125 | 0.123 | 0.130 | 1.018 | 0.309 |
| | peou | 0.006 | 0.891 | 0.006 | 1.110 | 0.265 |
| | pu | 0.002 | 0.765 | 0.002 | 1.106 | 0.267 |
| | inter_peou_pu_pd | 0.030 | 0.006 | 0.416 | 5.243 | 0.000 |
| | inter_peou_pu_wc | -0.034 | 0.012 | -0.858 | -2.760 | 0.006 |
| | inter_peou_pu_sftwre_tools | 0.021 | 0.012 | 0.517 | 1.650 | 0.100 |

5-46a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.532 | 0.207 | | 2.568 | 0.011 |
| | Physical_Demands | 0.011 | 0.039 | 0.010 | 0.286 | 0.775 |
| | Work_Conditions | 0.537 | 0.054 | 0.555 | 9.964 | 0.000 |
| | peou | 0.020 | 0.089 | 0.020 | 1.119 | 0.345 |
| | pu | 0.023 | 0.534 | 0.023 | 1.124 | 0.301 |
| | Software_Tools_Used | 0.305 | 0.055 | 0.316 | 5.579 | 0.000 |

5-46b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.672 | 0.225 | | 2.982 | 0.003 |
| | Physical_Demands | -0.047 | 0.054 | -0.043 | -0.872 | 0.384 |
| | Work_Conditions | 0.514 | 0.056 | 0.531 | 9.222 | 0.000 |
| | Software_Tools_Used | 0.300 | 0.055 | 0.311 | 5.496 | 0.000 |
| | peou | 0.001 | 0.47 | 0.001 | 0.856 | 0.562 |
| | pu | 0.002 | 0.59 | 0.002 | 0.912 | 0.517 |
| | inter_peou_pu_pd | 0.005 | 0.003 | 0.063 | 1.562 | 0.119 |

5-46c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 1.011 | 0.228 | | 4.425 | 0.000 |
| | Physical_Demands | -0.299 | 0.072 | -0.277 | -4.124 | 0.000 |
| | Work_Conditions | 0.583 | 0.056 | 0.603 | 10.469 | 0.000 |
| | Software_Tools_Used | 0.288 | 0.053 | 0.298 | 5.442 | 0.000 |
| | peou | 0.007 | 0.582 | 0.007 | 0.416 | 0.599 |
| | pu | 0.008 | 0.421 | 0.008 | 0.418 | 0.595 |
| | inter_peou_pu_pd | 0.029 | 0.006 | 0.407 | 5.140 | 0.000 |
| | inter_peou_pu_wc | -0.014 | 0.003 | -0.339 | -4.998 | 0.000 |

5-46d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 4 | (Constant) | 0.993 | 0.228 | | 4.361 | 0.000 |
| | Physical_Demands | -0.274 | 0.073 | -0.254 | -3.744 | 0.000 |
| | Work_Conditions | 0.798 | 0.124 | 0.824 | 6.421 | 0.000 |
| | Software_Tools_Used | 0.070 | 0.125 | 0.072 | 0.560 | 0.576 |
| | peou | 0.025 | 0.089 | 0.024 | 1.010 | 0.320 |
| | pu | 0.030 | 0.074 | 0.029 | 0.016 | 0.308 |
| | inter_peou_pu_pd | 0.027 | 0.006 | 0.378 | 4.706 | 0.000 |
| | inter_peou_pu_wc | -0.037 | 0.013 | -0.932 | -2.960 | 0.003 |
| | inter_peou_pu_sftwre_tools | 0.024 | 0.013 | 0.612 | 1.928 | 0.055 |

5-47a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.448 | 0.206 | | 2.172 | 0.031 |
| | Physical_Demands | 0.008 | 0.039 | 0.007 | 0.195 | 0.845 |
| | Work_Conditions | 0.553 | 0.054 | 0.564 | 10.297 | 0.000 |
| | peou | 0.002 | 0.712 | 0.002 | 0.130 | 0.899 |
| | pu | 0.004 | 0.853 | 0.004 | 0.135 | 0.886 |
| | Software_Tools_Used | 0.303 | 0.054 | 0.310 | 5.559 | 0.000 |

5-47b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 2 | (Constant) | 0.501 | 0.225 | | 2.223 | 0.027 |
| | Physical_Demands | -0.014 | 0.054 | -0.013 | -0.262 | 0.793 |
| | Work_Conditions | 0.545 | 0.056 | 0.555 | 9.772 | 0.000 |
| | Software_Tools_Used | 0.301 | 0.055 | 0.308 | 5.513 | 0.000 |
| | peou | 0.012 | 0.716 | 0.012 | 0.682 | 0.471 |
| | pu | 0.017 | 0.630 | 0.017 | 0.723 | 0.458 |
| | inter_peou_pu_pd | 0.002 | 0.003 | 0.023 | 0.584 | 0.559 |

5-47c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 0.829 | 0.229 | | 3.623 | 0.000 |
| | Physical_Demands | -0.258 | 0.073 | -0.236 | -3.558 | 0.000 |
| | Work_Conditions | 0.612 | 0.056 | 0.624 | 10.957 | 0.000 |
| | Software_Tools_Used | 0.289 | 0.053 | 0.296 | 5.456 | 0.000 |
| | peou | 0.009 | 0.056 | 0.009 | 0.075 | 0.861 |
| | pu | 0.010 | 0.047 | 0.010 | 0.086 | 0.810 |
| | inter_peou_pu_pd | 0.025 | 0.006 | 0.352 | 4.496 | 0.000 |
| | inter_peou_pu_wc | -0.013 | 0.003 | -0.324 | -4.834 | 0.000 |

5-47d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 0.813 | 0.228 | | 3.559 | 0.000 |
| | Physical_Demands | -0.235 | 0.073 | -0.216 | -3.204 | 0.001 |
| | Work_Conditions | 0.812 | 0.125 | 0.828 | 6.517 | 0.000 |
| | Software_Tools_Used | 0.086 | 0.125 | 0.088 | 0.685 | 0.494 |
| | peou | 0.015 | 0.372 | 0.015 | 0.152 | 0.917 |
| | pu | 0.018 | 0.250 | 0.018 | 0.184 | 0.873 |
| | inter_peou_pu_pd | 0.024 | 0.006 | 0.326 | 4.093 | 0.000 |
| | inter_peou_pu_wc | -0.035 | 0.013 | -0.871 | -2.794 | 0.005 |
| | inter_peou_pu_sftwre_tools | 0.023 | 0.013 | 0.564 | 1.795 | 0.073 |

5-48a: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 1 | (Constant) | 0.611 | 0.205 | | 2.981 | 0.003 |
| | Physical_Demands | -0.019 | 0.039 | -0.018 | -0.491 | 0.624 |
| | Work_Conditions | 0.535 | 0.053 | 0.553 | 10.040 | 0.000 |
| | peou | 0.030 | 0.046 | 0.030 | 1.134 | 0.256 |
| | pu | 0.025 | 0.081 | 0.025 | 1.129 | 0.286 |
| | Software_Tools_Used | 0.293 | 0.054 | 0.304 | 5.430 | 0.000 |

5-48b: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 2 | (Constant) | 0.694 | 0.223 | | 3.106 | 0.002 |
| | Physical_Demands | -0.053 | 0.053 | -0.049 | -1.000 | 0.318 |
| | Work_Conditions | 0.522 | 0.055 | 0.539 | 9.439 | 0.000 |
| | Software_Tools_Used | 0.291 | 0.054 | 0.301 | 5.369 | 0.000 |
| | peou | 0.001 | 0.065 | 0.001 | 1.157 | 0.312 |
| | pu | 0.000 | 0.047 | 0.001 | 1.154 | 0.313 |
| | inter_peou_pu_pd | 0.003 | 0.003 | 0.038 | 0.935 | 0.351 |

5-48c: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 3 | (Constant) | 1.062 | 0.225 | | 4.724 | 0.000 |
| | Physical_Demands | -0.327 | 0.071 | -0.303 | -4.587 | 0.000 |
| | Work_Conditions | 0.597 | 0.055 | 0.617 | 10.883 | 0.000 |
| | Software_Tools_Used | 0.277 | 0.052 | 0.288 | 5.328 | 0.000 |
| | peou | 0.013 | 0.074 | 0.013 | 0.846 | 0.425 |
| | pu | -0.018 | 0.069 | -0.018 | 0.921 | 0.420 |
| | inter_peou_pu_pd | 0.029 | 0.006 | 0.411 | 5.273 | 0.000 |
| | inter_peou_pu_wc | -0.015 | 0.003 | -0.368 | -5.518 | 0.000 |

5-48d: Impact of Individual Predictors on Dependent Variable

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
| 4 | (Constant) | 1.046 | 0.224 | | 4.661 | 0.000 |
| | Physical_Demands | -0.304 | 0.072 | -0.282 | -4.208 | 0.000 |
| | Work_Conditions | 0.803 | 0.122 | 0.829 | 6.561 | 0.000 |
| | Software_Tools_Used | 0.068 | 0.123 | 0.071 | 0.555 | 0.579 |
| | peou | 0.022 | 0.063 | 0.022 | 0.976 | 0.359 |
| | pu | -0.011 | 0.077 | -0.011 | 0.752 | 0.362 |
| | inter_peou_pu_pd | 0.027 | 0.006 | 0.383 | 4.845 | 0.000 |
| | inter_peou_pu_wc | -0.038 | 0.012 | -0.938 | -3.024 | 0.003 |
| | inter_peou_pu_sftwre_tools | 0.023 | 0.012 | 0.588 | 1.880 | 0.061 |

## APPENDIX J – Definition of Variables used in This Study

| Sr. No. | Name of Dimension | Definition | Source |
|---|---|---|---|
| 1 | Extraversion | People with extravert nature are “extraverts and exhibit characteristics of sociability, assertiveness, talkativeness, and high activity. In addition, extraverts are cheerful, energetic, and optimistic” | (Bruck and Allen, 2003) |
| 2 | Agreeableness | People who are high in agreeableness are “helpful, sympathetic to others, soft-hearted, cooperative, and good-natured” | (Bruck and Allen, 2003) |
| 3 | Conscientiousness | People with high conscientiousness are “purposeful, determined, punctual, reliable, organized, strong-willed, and usually attains academic or organizational success” | (Bruck and Allen, 2003) |
| 4 | Neuroticism | People with high neuroticism show “emotional instability and will show characteristics of worrying, fear, guilt, sadness, anger, embarrassment and disgust.” | (Bruck and Allen, 2003) |
| 5 | Openness to Experience | These people have active imagination, aesthetic sensitivity, intellectual curiosity, preference for variety and independence of judgment | (Costa and McCrae, 1991) |
| 6 | Autonomy | Degree of freedom or independence to carry out work | (Hackman and Oldham, 1975) |
| 9 | Task Variety | Number of different tasks to do while performing job | (Morgeson and Humphrey, 2006) |
| 10 | Task Significance | Degree to which job affects the life of others | (Hackman and Oldham, 1975) |
| 11 | Task Identity | How much job is being completed? Whether the person is performing the complete job or only some part of it? | (Sims, Szilagyi and Keller, 1976b) |
| 12 | Feedback from Job | Job itself provides the feedback about the effectiveness of various tasks performed | (Hackman and Oldham, 1976) |
| 13 | Job Complexity | Level of difficulty of job. Whether job is complex or too much simple? | (Morgeson and Humphrey, 2006) |
| 14 | Information Processing | How much data or information needs to be processed in order to complete the job? | (Morgeson and Humphrey, 2006) |
| 15 | Problem Solving | Degree to which a job requires unique or innovative solutions | (Morgeson and Humphrey, 2006) |
| 16 | Skill Variety | Variety of skills required to complete a job | (Hackman and Oldham, 1980) |
| 17 | Specialization | Degree to which a job requires specialized skills or knowledge | (Morgeson and Humphrey, 2006) |
| 18 | Social Support | Degree to which job requires assistance or advice from others | (Karasek, 1979); (Karasek et al., 1998) |
| 19 | Initiated Interdependence | Degree or quantity of work flow from one job to another | (Kiggundu, 1981) |
| 20 | Received Interdependence | Degree to which other jobs can affect this job | (Kiggundu, 1981) |
| 21 | Interaction Outside the Organization | Extent to which employees need to interact with persons who are outside the organization | (Morgeson and Humphrey, 2006) |
| 22 | Feedback from Others | Degree to which other members of the organization provide their feedback about the performance | (Morgeson and Humphrey, 2006) |

| Sr. No. | Name of Dimension | Definition | Source |
|---|---|---|---|
| 23 | Ergonomics | Degree to which job requires proper position and movement | (Morgeson and Humphrey, 2006) |
| 24 | Physical Demands | Level of physical exertion on the job | (Morgeson and Humphrey, 2006) |
| 25 | Work Conditions | Environment in which work is being performed | (Morgeson and Humphrey, 2006) |
| 26 | Equipment Use (Adapted: Tools and Software Use) | Complexity, variety and use of tools and softwares on this job | (Morgeson and Humphrey, 2006) |
| 27 | Perceived Ease of Use (PEOU) | Perception towards technology that how easy it is to use and understand | (Zeithaml, Parasuraman and Malhotra, 2002) |
| 28 | Perceived Usefulness (PU) | Perception of an individual that using the technology will enhance or improve the work performance | (Davis, 1993) |
| 29 | Knowledge Sharing Behavior | Sharing of acquired knowledge by one member to other members of the organization | (Ryu, Ho and Han, 2003) |

## APPENDIX K – Personality Items and Coding

| Name of Dimension | Items | Coding |
|---|---|---|
| Extraversion | **I am someone who is…** | |
| | …talkative. | P1 |
| | …reserved. | P2 |
| | …full of energy. | P3 |
| | …sometimes shy, inhibited. | P4 |
| | …outgoing, sociable. | P5 |
| | **I am someone who…** | |
| | …generates a lot of enthusiasm. | P20 |
| | …tends to be quiet. | P21 |
| | …has an assertive personality. | P22 |
| Agreeableness | **I am someone who is...** | |
| | …helpful and unselfish with others. | P6 |
| | ...generally trusting. | P7 |
| | ...considerate and kind to almost everyone. | P8 |
| | ...sometimes rude to others. | P10 |
| | **I am someone who ...** | |
| | ..tends to find fault with others. | P23 |
| | ...starts quarrels with others. | P24 |
| | ...has a forgiving nature. | P25 |
| | ...can be cold and aloof. | P26 |
| | ...likes to cooperate with others. | P27 |
| Conscientiousness | **I am someone who is...** | |
| | ...a reliable worker. | P9 |
| | ...easily distracted. | P11 |
| | **I am someone who ...** | |
| | …does a thorough job. | P28 |
| | ...can be somewhat careless. | P29 |
| | ...tends to be disorganized. | P30 |
| | ...tends to be lazy. | P31 |
| | ...perseveres until the task is finished. | P32 |
| | ...does things efficiently. | P33 |
| | ...makes plans and follows through with them. | P34 |
| Neuroticism | **I am someone who is...** | |
| | ...depressed, blue. | P12 |
| | ...relaxed, handles stress well. | P13 |
| | ...emotionally stable, not easily upset. | P14 |
| | **I am someone who ...** | |
| | ...can be tense. | P35 |
| | ...worries a lot. | P36 |
| | ...can be moody. | P37 |
| | ...remains calm in tense situations. | P38 |
| | ...gets nervous easily. | P39 |

| Name of Dimension | Items | Coding |
|---|---|---|
| Openness to Experience | **I am someone who is...** | |
| | ...original comes up with new ideas. | P15 |
| | ...curious about many different things. | P16 |
| | ...ingenious, a deep thinker. | P17 |
| | ...inventive. | P18 |
| | ...sophisticated in art, music, or literature. | P19 |
| | **I am someone who ...** | |
| | ...has an active imagination. | P40 |
| | ...values artistic, aesthetic experiences. | P41 |
| | ...prefers work that is routine. | P42 |
| | ...likes to reflect, play with ideas. | P43 |
| | ...has few artistic interests. | P44 |

## APPENDIX L – Work Design Characteristics Items and Coding

| Name of Dimension | Items | Coding |
|---|---|---|
| Work Schedule Autonomy | **My job allows me to...** | |
| | ... make my own decisions about how to schedule my work. | A1 |
| | ... decide on the order in which things are done on the job. | A2 |
| | ... plan how I do my work. | A3 |
| Decision Making Autonomy | ... use my personal initiative or judgment in carrying out the work. | A4 |
| | ... make a lot of decisions on my own. | A5 |
| | **My job ...** | |
| | ... provides me with significant autonomy in making decisions. | A9 |
| Work Methods Autonomy | **My job allows me to...** | |
| | ... make decisions about what methods I use to complete my work. | A6 |
| | ... decide on my own how to go about doing my work. | A7 |
| | **My job ...** | |
| | ... gives me considerable opportunity for independence and freedom in how I do the work. | A10 |
| Task Variety | **My job ...** | |
| | ... requires the performance of a wide range of tasks. | A11 |
| | **My job involves...** | |
| | ... a great deal of task variety. | A18 |
| | ... doing a number of different things. | A19 |
| | ... performing a variety of tasks. | A21 |
| Task Significance | **My job ...** | |
| | ... itself is very significant and important in the broader scheme of things. | A12 |
| | ... has a large impact on people outside the organization. | A13 |
| | The results of my work are likely to significantly affect the lives of other people. | A22 |
| | The work performed by me on the job has a significant impact on people outside the organization. | A23 |
| Task Identity | **My job allows me to...** | |
| | ... complete work I start. | A8 |
| | **My job ...** | |
| | ... is arranged so that I can do an entire piece of work from beginning to end. | A14 |
| | ... provides me the chance to completely finish the pieces of work I begin. | A15 |
| | **My job involves...** | |
| | ... completing a piece of work that has an obvious beginning and end. | A20 |
| Feedback from Job | **My job ...** | |
| | ... itself provides feedback on my performance. | A16 |
| | ... itself provides me with information about my performance. | A17 |
| | The work activities themselves provide direct and clear information about the effectiveness (e.g. quality and quantity) of my job performance. | A24 |
| Job Complexity | **My job...** | |

| Name of Dimension | Items | Coding |
|---|---|---|
| | ... involves performing relatively simple tasks. | B1 |
| | ...comprises relatively uncomplicated tasks. | B4 |
| | The tasks on my job are simple and uncomplicated. | B6 |
| | **My job requires...** | |
| | ... that I only do one task or activity at a time. | B8 |
| Information Processing | **My job requires...** | |
| | ... me to monitor a great deal of information. | B9 |
| | ... that I engage in a large amount of thinking. | B10 |
| | ... me to keep track of more than one thing at a time. | B11 |
| | ... me to analyze a lot of information. | B12 |
| Problem Solving | **My job...** | |
| | ...involves solving problems that have no obvious correct answer. | B2 |
| | ...often involves dealing with problems that I have not met before. | B3 |
| | **My job requires...** | |
| | ... me to be creative. | B13 |
| | ... unique ideas or solutions to problems. | B14 |
| Skill Variety | **My job requires...** | |
| | ... a variety of skills. | B15 |
| | ... me to utilize a variety of different skills in order to complete the work. | B16 |
| | ... me to use a number of complex or high-level skills. | B17 |
| | ... the use of a number of skills. | B18 |
| Specialization | **My job...** | |
| | ...is highly specialized in terms of purpose, tasks, or activities. | B5 |
| | The tools, procedures and materials used on my job are highly specialized in terms of purpose. | B7 |
| | **My job requires...** | |
| | ... very specialized knowledge and skills. | B19 |
| | ... a depth of knowledge and expertise. | B20 |
| Social Support | I have the opportunity to develop close friendships in my job. | C1 |
| | I have the chance in my job to get to know other people. | C2 |
| | I have the opportunity to meet with others in my work. | C3 |
| | My supervisor is concerned about the welfare of the people that work for him/her. | C4 |
| | People I work with take a personal interest in me. | C5 |
| | People I work with are friendly. | C6 |
| Initiated Interdependence | Other jobs depend directly on my job. | C7 |
| | Unless my job gets done, other jobs cannot be completed. | C8 |
| | **My job...** | |
| | ... requires me to accomplish my job before others complete their job. | C14 |
| Received Interdependence | …cannot be done unless others do their work. | C11 |
| | ... activities are greatly affected by the work of other people. | C15 |
| | ... depends on the work of many different people for its completion. | C16 |

| Name of Dimension | Items | Coding |
|---|---|---|
| Interaction Outside the Organization | On the job, I frequently communicate with people who do not work for the same organization as I do. | C12 |
| | **My job...** | |
| | ... requires spending a great deal of time with people outside my organization. | C17 |
| | ... involves interaction with people who are not members of my organization. | C18 |
| | ... involves a great deal of interaction with people outside my organization. | C19 |
| Feedback from Others | I receive a great deal of information from my manager and co-workers about my job performance. | C9 |
| | I receive feedback on my performance from other people in my organization (such as my manager or co-workers). | C10 |
| | Other people in the organization, such as managers and co-workers, provide information about the effectiveness (e.g., quality and quantity) of my job performance. | C13 |
| | **My job...** | |
| Ergonomics | ... involves excessive reaching. | D4 |
| | My work place allows for all size differences between people in terms of clearance, reach, eye height, leg room, etc. | D10 |
| | The seating arrangements on my job are adequate (e.g., ample opportunities to sit, comfortable chairs, good postural support). | D12 |
| | **My job...** | |
| Physical Demands | ... requires a great deal of muscular endurance. | D7 |
| | ... requires great deal of muscular strength. | D8 |
| | ... requires lot of physical effort. | D9 |
| | **My job...** | |
| Work Conditions | ... has a low risk of accident. | D1 |
| | ... takes place in an environment free from health hazards (e.g., chemicals, fumes, etc.). | D2 |
| | ... occurs in a clean environment. | D3 |
| | My work place is free from excessive noise. | D11 |
| | The climate at the work place is comfortable in terms of temperature and humidity. | D13 |
| | **My job...** | |
| Tools and Software Use | ... involves the use of a variety of different software. | D5 |
| | ... involves the use of complex tools or technology. | D6 |
| | A lot of time was required to learn the tools and softwares used on the job. | D14 |

## APPENDIX M – PEOU and PU Items and Coding

| Name of Dimension | Items | Coding |
|---|---|---|
| Perceived Ease of Use (PEOU) | I find knowledge sharing technology cumbersome to use. | KST11 |
| | I find it easy to get the knowledge sharing technology to do what I want to do. | KST12 |
| | I find it takes a lot of effort to become skillful at using knowledge sharing technology. | KST13 |
| | Learning to operate the knowledge sharing technology is easy for me. | KST14 |
| | Interacting with knowledge sharing technology is often frustrating. | KST15 |
| | The knowledge sharing technology is rigid and inflexible to interact with. | KST16 |
| | It is easy for me to remember how to perform tasks using the knowledge sharing technology. | KST17 |
| | Interacting with knowledge sharing technology requires a lot of mental effort. | KST18 |
| | My interaction with knowledge sharing technology is clear and understandable. | KST19 |
| | Overall, I find the knowledge sharing technology easy to use. | KST20 |
| Perceived Usefulness (PU) | **Using knowledge sharing technology...** | |
| | …improves the quality of work I do. | KST1 |
| | …gives me greater control over my work. | KST2 |
| | …increases my productivity. | KST3 |
| | ... improves my job performance. | KST4 |
| | ... allows me to accomplish more work than would otherwise be possible. | KST5 |
| | ... enhances my effectiveness on the job. | KST6 |
| | … makes it easier to do my job. | KST7 |
| | Knowledge sharing technology enables me to accomplish tasks more quickly. | KST8 |
| | Knowledge sharing technology supports critical aspects of my job. | KST9 |
| | Overall, I find the knowledge sharing technology useful in my job. | KST10 |

## APPENDIX N – General Knowledge Sharing Behavior Items and Coding

| Name of Dimension | Items | Coding |
|---|---|---|
| General Explicit Knowledge Donation Behavior | **I frequently share work reports and official documents...** | |
| | ... with members of my organization. | GEKDB1 |
| | ... that I prepare by myself with members of my organization. | GEKDB2 |
| General Explicit Knowledge Collection Behavior | **I frequently collect work reports and official documents from...** | |
| | ... members of my organization. | GEKCB1 |
| | ...others that they prepare by themselves. | GEKCB2 |
| General Implicit Knowledge Donation Behavior | **I frequently share knowledge...** | |
| | ... based on my experience with other organizational members. | GIKDB1 |
| | ...of know-where or know-whom with other organizational members. | GIKDB2 |
| | ... based on my expertise with other organizational members. | GIKDB3 |
| General Implicit Knowledge Collection Behavior | **I frequently collect knowledge...** | |
| | ... from other organizational members based on their experience. | GIKCB1 |
| | ... of know-where or know-whom with other organizational members. | GIKCB2 |
| | ... from other organizational members based in their expertise. | GIKCB3 |

## APPENDIX O – Specific Knowledge Sharing Behavior Items and Coding

| Name of Dimension | Items | Coding |
|---|---|---|
| Explicit Knowledge Donation Behavior (EKDB) | I **SHARE** reports and documents about ... | |
| | ...translating software specifications into an executable code. | EKDB 1 |
| | ... various process models such as incremental, prototype, spiral etc., and of various programming paradigms (structured, assembly, procedural, object-oriented, and logic). | EKDB 2 |
| | ...how to use source code development tools (IDEs) and specification to code translation tools. | EKDB 3 |
| | ...generating reusable code and about reusability of code. | EKDB 4 |
| | ...reusable libraries, off the shelf software components, module referencing, and software portability issues and techniques. | EKDB 5 |
| | ...writing comments on the code/program for understanding and preparing external program documentation. | EKDB 6 |
| | ...use of standardized documentation techniques during the software development process. | EKDB 7 |
| Explicit Knowledge Collection Behavior (EKCB) | I **COLLECT** reports and documents about .... | |
| | ...translating software specifications into an executable code. | EKCB1 |
| | ... various process models such as incremental, prototype, spiral etc., and of various programming paradigms (structured, assembly, procedural, object-oriented, and logic). | EKCB2 |
| | ...how to use source code development tools (IDEs) and specification to code translation tools. | EKCB3 |
| | ...generating reusable code and about reusability of code. | EKCB4 |
| | ...reusable libraries, off the shelf software components, module referencing, and software portability issues and techniques. | EKCB5 |
| | ...writing comments on the code/program for understanding and preparing external program documentation. | EKCB6 |
| | ...use of standardized documentation techniques during the software development process. | EKCB7 |
| Implicit Knowledge Donation Behavior (IKDB) | I **SHARE** knowledge which **I** gained base on **MY** experience or expertise about ... | |
| | ...translating software specifications into an executable code. | IKDB1 |
| | ... various process models such as incremental, prototype, spiral etc., and of various programming paradigms (structured, assembly, procedural, object-oriented, and logic). | IKDB2 |
| | ...how to use source code development tools (IDEs) and specification to code translation tools. | IKDB3 |
| | ...generating reusable code and about reusability of code. | IKDB4 |
| | ...reusable libraries, off the shelf software components, module referencing, and software portability issues and techniques. | IKDB5 |
| | ...writing comments on the code/program for understanding and preparing external program documentation. | IKDB6 |
| | ...use of standardized documentation techniques during the software development process. | IKDB7 |
| Implicit Knowledge Collection Behavior (IKCB) | I **COLLECT** knowledge which **OTHERS** gained base on **THEIR** experience or expertise about ... | |
| | ...translating software specifications into an executable code. | IKCB1 |
| | ... various process models such as incremental, prototype, spiral etc., | IKCB2 |

| Name of Dimension | Items | Coding |
|---|---|---|
| | and of various programming paradigms (structured, assembly, procedural, object-oriented, and logic). | |
| | ...how to use source code development tools (IDEs) and specification to code translation tools. | IKCB3 |
| | ...generating reusable code and about reusability of code. | IKCB4 |
| | ...reusable libraries, off the shelf software components, module referencing, and software portability issues and techniques. | IKCB5 |
| | ...writing comments on the code/program for understanding and preparing external program documentation. | IKCB6 |
| | ...use of standardized documentation techniques during the software development process. | IKCB7 |

**APPENDIX P – Similarity Index Summary**

| ORIGINALITY REPORT | | | |
|---|---|---|---|
| 12 % | 7 % | 10 % | 3 % |
| SIMILARITY INDEX | INTERNET SOURCES | PUBLICATIONS | STUDENT PAPERS |

## APPENDIX Q – Hypotheses Testing between Big Five Personality Traits, PEOU, PU and Knowledge Sharing Behavior

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 1 | **$H_1$**: Personality traits → KSB of SEs. | - | - | - | - | Accepted |
| 2 | **$H_3$**: Personality traits → KSB of SEs (moderator: PEOU). | - | - | - | - | Accepted |
| 3 | **$H_4$**: Personality traits → KSB of SEs (moderator: PU). | - | - | - | - | Accepted |
| 4 | **$H_5$**: Personality traits → KSB of SEs (moderators: PEOU + PU). | - | - | - | - | Accepted |
| 5 | **$H_{1a}$**: Personality traits → EKDB of SEs. | 0.768 | 0.765 | 0.768 (76.8%) | 0.000 | Accepted |
| 6 | **$H_{3a}$:** Personality traits → EKDB of SEs (moderator: PEOU). | 0.772 | 0.766 | 0.004 (0.4%) | 0.000 | Accepted |
| 7 | **$H_{4a}$:** Personality traits → EKDB of SEs (moderator: PU). | 0.830 | 0.825 | 0.062 (6.2%) | 0.000 | Accepted |
| 8 | **$H_{5a}$:** Personality traits → EKDB of SEs (moderators: PEOU + PU). | 0.781 | 0.775 | 0.013 (1.3%) | 0.000 | Accepted |
| 9 | **$H_{1b}$:** Personality traits → EKCB of SEs. | 0.764 | 0.761 | 0.764 (76.4%) | 0.000 | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 10 | **$H_{3b}$:** Personality traits → EKCB of SEs (moderator: PEOU). | 0.767 | 0.760 | 0.003 (0.3%) | 0.000 | Accepted |
| 11 | **$H_{4b}$:** Personality traits → EKCB of SEs (moderator: PU). | 0.815 | 0.810 | 0.051 (5.1%) | 0.000 | Accepted |
| 12 | **$H_{5b}$:** Personality traits → EKCB of SEs (moderators: PEOU + PU). | 0.774 | 0.767 | 0.01 (1.0%) | 0.000 | Accepted |
| 13 | **$H_{1c}$:** Personality traits → IKDB of SEs. | 0.750 | 0.747 | 0.750 (75.0%) | 0.000 | Accepted |
| 14 | **$H_{3c}$:** Personality traits → IKDB of SEs (moderator: PEOU). | 0.756 | 0.749 | 0.006 (0.6%) | 0.000 | Accepted |
| 15 | **$H_{4c}$:** Personality traits → IKDB of SEs (moderator: PU). | 0.808 | 0.803 | 0.058 (5.8%) | 0.000 | Accepted |
| 16 | **$H_{5c}$:** Personality traits → IKDB of SEs (moderators: PEOU + PU). | 0.763 | 0.757 | 0.013 (1.3%) | 0.000 | Accepted |
| 17 | **$H_{1d}$:** Personality traits → IKCB of SEs. | 0.768 | 0.765 | 0.768 (76.8%) | 0.000 | Accepted |
| 18 | **$H_{3d}$:** Personality traits → IKCB of SEs (moderator: PEOU). | 0.771 | 0.765 | 0.003 (0.3%) | 0.000 | Accepted |

| Sr. No. | Hypothesis | R Square | Adjusted R Square | R Square Change | p Value | Result |
|---|---|---|---|---|---|---|
| 19 | **$H_{4d}$:** Personality traits → IKCB of SEs (moderator: PU). | 0.821 | 0.816 | 0.053 (5.3%) | 0.000 | Accepted |
| 20 | **$H_{5d}$:** Personality traits → IKCB of SEs (moderators: PEOU + PU). | 0.780 | 0.774 | 0.012 (1.2%) | 0.000 | Accepted |

**APPENDIX R – Sampling Details**

| Source | Sector | Location | Total Number of Companies | Companies Agreed to Participate |
|---|---|---|---|---|
| http://www.smecorp.gov.my | ICT | Perak | 37 | 14 |
| | | Kuala Lumpur | 163 | 89 |
| | | Penang | 71 | 40 |
| | | Pahang | 6 | 1 |
| http://www.smeinfo.com.my | Services (Including ICT) | Perak | 270 | 78 |
| | | Penang | 354 | 146 |
| | | Kuala Lumpur | 1248 | 630 |
| | | Pahang | 180 | 70 |
| http://www.701pages.com | Computer Software & Development | Kuala Lumpur | 126 | 53 |
| | | Penang | 16 | 16 |
| | | Perak | 12 | 12 |
| | | Pahang | 0 | 0 |
| | | | Total = 2,483 | Total = 1,149 |

**Random Sampling**

| | |
|---|---|
| http://www.smecorp.gov.my | Numbered from 1 – 144 for random sampling |
| http://www.smeinfo.com.my | Numbered from 145 – 1068 for random sampling |
| http://www.701pages.com | Numbered from 1069 – 1149 for random sampling |
| Sample Size | 333 (5% margin of error, 95% confidence interval) |
| Companies Contacted to Participate | 667 (Double of sample size) |
| Companies Agreed to Participate | 279 (Perak = 23, Kuala Lumpur = 229, Penang = 18, Pahang = 9) |
| Total number of Software Developers Employed by these Companies | 1,964 |